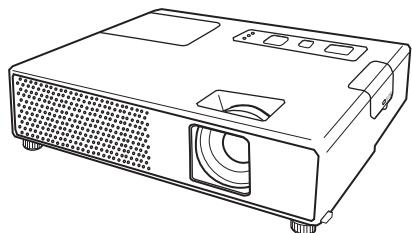


Projector

CPX2/CPX6

User's Manual (detailed)

Operating Guide



Thank you for purchasing this projector.

⚠WARNING ► Before using this product, please read all manuals for this product. Be sure to read "Safety Guide" first. After reading them, store them in a safe place for future reference.

About this manual

Various symbols are used in this manual. The meanings of these symbols are described below.

⚠WARNING This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.

⚠CAUTION This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

 Please refer to the pages written following this symbol.

NOTE • The information in this manual is subject to change without notice.

- The manufacturer assumes no responsibility for any errors that may appear in this manual.
- The reproduction, transfer or copy of all or any part of this document is not permitted without express written consent.

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- Windows is a registered trademark of Microsoft Corporation.

All other trademarks are the properties of their respective owners.

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Projector features

This projector has a capability to project various picture signals onto a screen.

This projector requires only a minimal amount of space for installation and can produce a large projected image from even a short distance.

This projector also can give a benefit to mobile users and others by offering IEEE802.11g and IEEE802.11b wireless network and 10BASE-T/100BASE-TX wired network communication and a special function named "PC-LESS Presentation". Even without PC, this projector realizes the display on screen, getting JPEG, Bitmap, PNG and MPEG4 from SD Memory Card or USB memory.

Preparations

Contents of package

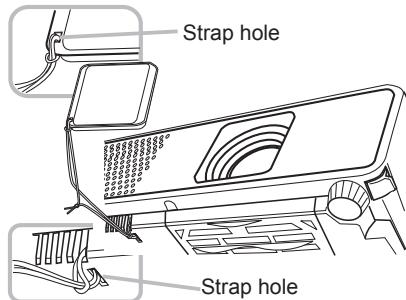
Please see the "Contents of package" in the "User's Manual (concise)" which is a book. Your projector should come with the items shown there. Contact immediately your dealer if anything is missing.

NOTE • Keep the original packing materials, for future reshipment. Be sure to use the original packing materials when moving the projector. Use special caution for the lens.

Fastening the lens cover

To avoid losing the lens cover, please fasten the lens cover to the projector using the enclosed strap.

1. Fix the strap to the strap hole of the lens cover.
Thread one end of the strap through the strap hole of the lens cover and make the loop at the end, and let the other end of the strap through the loop.
Not have a knot in the strap at either end.
2. Fix the strap to the strap hole of the projector.
Thread the other end of the strap through the strap hole of the projector and make the loop there. Let the lens cover with the one end of strap though the loop.

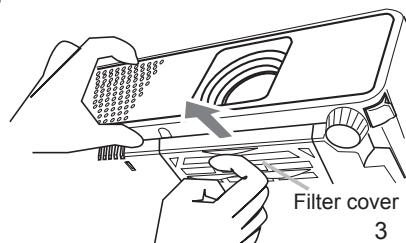


Replacing the filter cover for bottom-up use

For the projector installed bottom-up, please replace the filter cover with the enclosed filter cover for bottom-up use, to keep necessary ventilation space.

Please refer to the "Air filter" (57) for how to detach and attach a filter cover.

WARNING ▶ Consult with your dealer before a special installation such as suspending from a ceiling.



Part names

Projector

(1) Lamp cover (図55)
The lamp unit is inside.

(2) Focus ring (図17)

(3) Zoom ring (図17)

(4) Control panel (図5)

(5) SD card slot cover (図10)

(6) Elevator knobs (x 2) (図17)

(7) Elevator feet (x 2) (図17)

(8) Lens (図14, 59)

(9) Lens cover (図3)

(10) Intake vents

(11) Filter cover (図57)
The air filter and intake vent are inside.

(12) Speaker (図33)

(13) Exhaust vents

(14) AC inlet (図11)

(15) LAN port (図8)

(16) USB STORAGE port (図8)

(17) USB port (図8)

(18) COMPUTER IN port (図8)

(19) VIDEO port (図8)

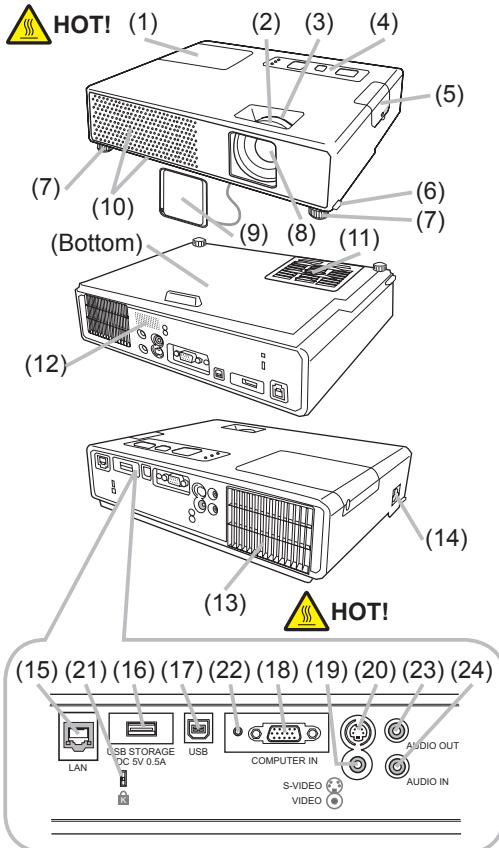
(20) S-VIDEO port (図8)

(21) Security slot (図11)

(22) Shutdown switch (図62)

(23) AUDIO OUT port (図8)

(24) AUDIO IN port (図8)



⚠WARNING ▶ HOT! : Do not touch around the lamp cover and the exhaust vents during use or just after use, since it is too hot.

▶ Do not look into the lens or vents while the lamp is on, since the strong light is not good for your eyes.

▶ Do not handle the elevator knobs without holding the projector, since the projector may drop down.

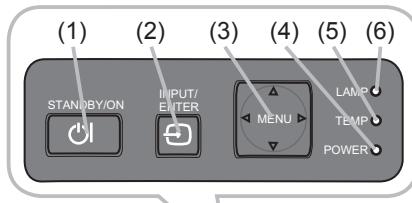
⚠CAUTION ▶ Maintain normal ventilation to prevent the projector from heating up. Do not cover, block or plug up the vents. Do not place anything that can stick or be sucked to the vents, around the intake vents. Clean the air filter periodically.

▶ Do not use the security slot to prevent the projector from falling down, since it is not designed for it.

▶ Use the shutdown switch only when the projector is not turned off by normal procedure, since pushing this switch stops operation of the projector without cooling it down.

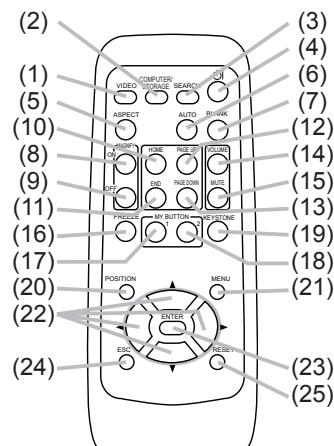
Control panel

- (1) STANDBY/ON button (図14)
- (2) INPUT/ENTER button (図15, 21)
- (3) MENU button (図21)
- It consists of four cursor buttons.
- (4) POWER indicator (図14, 61)
- (5) TEMP indicator (図61)
- (6) LAMP indicator (図61)

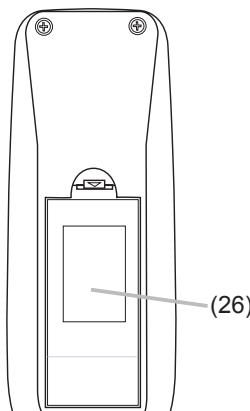


Remote control

- (1) VIDEO button (図16)
- (2) COMPUTER/STORAGE button (図15)
- (3) SEARCH button (図16)
- (4) STANDBY/ON button (図14)
- (5) ASPECT button (図16)
- (6) AUTO button (図18)
- (7) BLANK button (図20)
- (8) MAGNIFY - ON button (図19)
- (9) MAGNIFY - OFF button (図13, 19)
- (10) HOME button (図13)
- (11) END button (図13)
- (12) PAGE UP button (図13)
- (13) PAGE DOWN button (図13)
- (14) VOLUME button (図15)
- (15) MUTE button (図13, 15)
- (16) FREEZE button (図20)
- (17) MY BUTTON - 1 button (図40)
- (18) MY BUTTON - 2 button (図40)
- (19) KEYSTONE button (図19)
- (20) POSITION button (図18)
- (21) MENU button (図21)
- (22) ▲/▼/◀/▶ cursor buttons (図13, 21)
- (23) ENTER button (図13, 21)
- (24) ESC button (図13, 21)
- (25) RESET button (図13, 21)
- (26) Battery cover (図12)



Back of
the remote control



Setting up

Install the projector according to the environment and manner the projector will be used in.

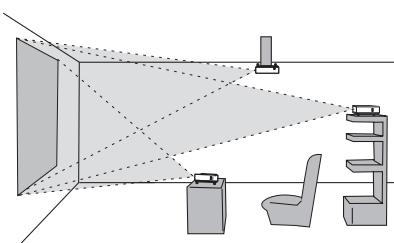
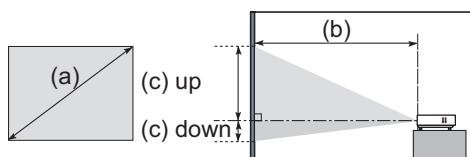
Arrangement

Refer to the illustrations and tables below to determine screen size and projection distance.

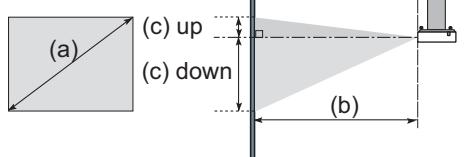
The values shown in the table are calculated for a full size screen: 1024×768.

- (a) Screen size (diagonal)
- (b) Projection distance ($\pm 10\%$)
- (c) Screen height ($\pm 10\%$)

On a horizontal surface



Suspended from the ceiling



- Keep a space of 30 cm or more between the sides of the projector and other objects such as walls.
- Consult with your dealer before a special installation such as suspending from a ceiling.

(a) Screen size (diagonal)		4 : 3 screen								16 : 9 screen							
		(b) Projection distance		(c) Screen height						(b) Projection distance		(c) Screen height					
				min.	max.	down		up				min.	max.	down	up	down	up
inch	m	m	inch	cm	inch	cm	inch	cm	inch	m	inch	m	inch	cm	inch	cm	inch
30	0.8	0.8	30	0.9	36	7	3	39	15	0.8	33	1.0	39	1	0	37	14
40	1.0	1.0	40	1.2	48	9	3	52	21	1.1	44	1.3	53	1	0	49	19
50	1.3	1.3	50	1.5	61	11	4	65	26	1.4	55	1.7	66	1	1	61	24
60	1.5	1.5	61	1.9	73	13	5	78	31	1.7	66	2.0	79	2	1	73	29
70	1.8	1.8	71	2.2	85	15	6	91	36	2.0	77	2.4	93	2	1	85	34
80	2.0	2.1	81	2.5	97	17	7	105	41	2.2	88	2.7	106	2	1	97	38
90	2.3	2.3	91	2.8	110	20	8	118	46	2.5	100	3.0	120	2	1	110	43
100	2.5	2.6	102	3.1	122	22	9	131	51	2.8	111	3.4	133	3	1	122	48
120	3.0	3.1	122	3.7	147	26	10	157	62	3.4	133	4.1	160	3	1	146	58
150	3.8	3.9	153	4.7	183	33	13	196	77	4.2	166	5.1	200	4	2	183	72
200	5.1	5.2	204	6.2	245	44	17	261	103	5.6	222	6.8	267	5	2	243	96
250	6.4	6.5	255	7.8	306	54	21	327	129	7.1	278	8.5	334	7	3	304	120
300	7.6	7.8	306	9.3	368	65	26	392	154	8.5	334	10.2	400	8	3	365	144

⚠WARNING ► Place the projector in a stable horizontal position. If the projector falls or is knocked over it could cause injury and/or damage to the projector. Using a damaged projector could then result in fire and/or electric shock.

- Do not place the projector on an unstable, slanted or vibrational surface such as a wobbly or inclined stand.
- Do not place the projector on its side, front or rear position.
- Consult with your dealer before a special installation such as suspending from a ceiling.

► Place the projector in a cool place, and ensure that there is sufficient ventilation. The high temperature of the projector could cause fire, burns and/or malfunction of the projector.

- Do not stop-up, block or otherwise cover the projector's vents.
- Keep a space of 30 cm or more between the sides of the projector and other objects such as walls.
- Do not place the projector on metallic thing or anything weak in heat.
- Do not place the projector on carpet, cushions or bedding.
- Do not place the projector in direct sunlight or near hot objects such as heaters.
- Do not anything near the projector lens or vents, or on top of the projector.
- Do not place anything that may be sucked into or stick to the vents on the bottom of the projector. This projector has some intake vents also on the bottom.

► Do not place the projector anyplace where it may get wet. Getting the projector wet or inserting liquid into the projector could cause fire, electric shock and/or malfunction of the projector.

- Do not place the projector in a bathroom or the outdoors.
- Do not place anything containing liquid near the projector.

⚠CAUTION ► Avoid placing the projector in smoky, humid or dusty place. Placing the projector in such places could cause fire, electric shock and/or malfunction of the projector.

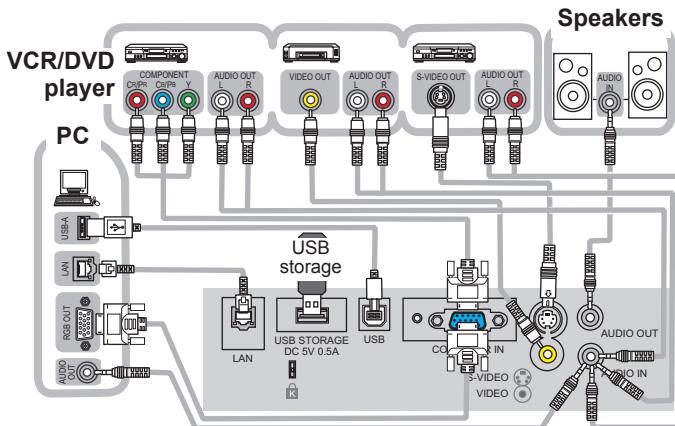
- Do not place the projector near humidifiers, smoking spaces or a kitchen.

► Position the projector to prevent light from directly hitting the projector's remote sensor.

Connecting your devices

Be sure to read the manuals for devices before connecting them to the projector. Make sure that all the devices are suitable to be connected with this product, and prepare the cables required to connect.

Please refer to the following illustrations to connect them.



NOTE • The SD card slot is in the side opposite to the lamp cover of the projector. Please see the “Using an SD card” (10).

- To display a signal from LAN, USB STORAGE or SD CARD, select the input signal to “MIU”. (15)
- The COMPUTER IN port can support a component signal also. For more information, please see the description of the COMPUTER IN item of the INPUT menu (30).

⚠WARNING ► Do not disassemble or modify the projector and accessories.

► Be careful not to damage the cables, and do not use damaged cables.

⚠CAUTION ► Turn off all devices and unplug their power cords prior to connecting them to projector. Connecting a live device to the projector may generate extremely loud noises or other abnormalities that may result in malfunction or damage to the device and the projector.

► Use appropriate accessory or otherwise designed cables. Ask your dealer about non-accessory cables which may have to be of a specific length or equipped with a core. For cables with a core only at one end, connect the end with the core to the projector.

► Make sure that devices are connected to the correct ports. An incorrect connection may result in malfunction or damage to the device and the projector.

Connecting your devices (continued)

NOTE • Be sure to read the manuals for devices before connecting them to the projector, and make sure that all the devices are suitable to be connected with this product. Before connecting to a PC, check the signal level, the signal timing, and the resolution.

- Some signal may need an adapter to input this projector.
- Some PCs have multiple screen display modes that may include some signals which are not supported by this projector.
- Although the projector can display signals with resolution up to UXGA (1600X1200), the signal will be converted to the projector's panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and the projector panel are identical.
- While connecting, make sure that the shape of the cable's connector fits the port to connect with. And be sure to tighten the screws on connectors with screws.
- When connecting a laptop PC to the projector, be sure to activate the PC's external RGB output. (Set the laptop PC to CRT display or to simultaneous LCD and CRT display.) For details on how this is done, please refer to the instruction manual of the corresponding laptop PC.
- When the picture resolution is changed on a pc depending on an input, automatic adjustment function may take some time and may not be completed. In this case, you may not be able to see a check box to select "Yes/No" for the new resolution on Windows. Then the resolution will go back to the original. It might be recommended to use other CRT or LCD monitors to change the resolution.
- In some cases, this projector may not display a proper picture or display any picture on screen. For example, automatic adjustment may not function correctly with some input signals. An input signal of composite sync or sync on G may confuse this projector, so the projector may not display a proper picture.

About Plug-and-Play capability

Plug-and-Play is a system composed of a PC, its operating system and peripheral equipment (i.e. display devices). This projector is VESA DDC 2B compatible. Plug-and-Play can be used by connecting this projector to a pc that is VESA DDC (display data channel) compatible.

- Take advantage of this feature by connecting an RGB cable to the COMPUTER IN port (DDC 2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
- Please use the standard drivers in your pc as this projector is a Plug-and-Play monitor.

Using a USB storage

In order to view images stored in a USB storage, such as a USB memory, insert the device into the USB STORAGE port.

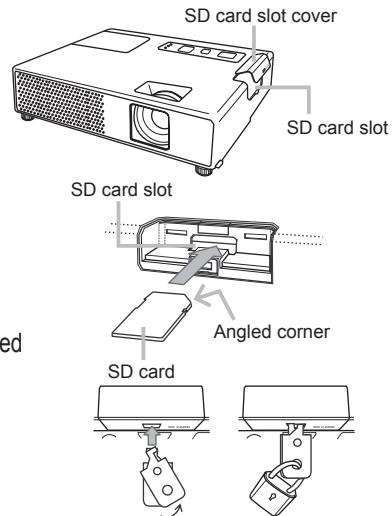
Before removing the USB storage, be sure to perform the REMOVE procedure using the SERVICE menu under the MIU menu. ([54](#))

Using an SD card

In order to view images in an SD Memory Card (SD card), insert the card into the SD card slot. If the wireless network function is required, load the internal clock battery ([58](#)) and insert the enclosed Wireless network card (SD card) in to the SD card slot.

Inserting an SD card

1. Make sure that the power code is not plugged into the projector.
2. Remove the SD card slot cover. It might be recommended to hook the edge of its side face up to remove it.
3. Slowly insert the SD card completely into the SD card slot. Make sure that the angled corner of the SD card is placed into the right side of the SD card slot, while inserting.
4. Replace the SD card slot cover. It is recommended that the cover is slid sideways to the projector.



Using the slot cover lock for security

Using the enclosed slot cover lock can prevent the SD card slot cover from being opened.

1. Open the two plates of the slot cover lock to put the tips of two plates together, and then insert the tips to the lock hole of the SD card slot cover.
2. Put the body of the two plates together. Then, hook a padlock or combination lock to the hole of the slot cover lock.

Removing the SD card

When removing “wireless network card”, turn the projector off and unplug the power cord.

On the other hand, when removing the “SD Memory Card”, be sure to perform the REMOVE procedure using the SERVICE menu under the MIU menu. ([54](#))

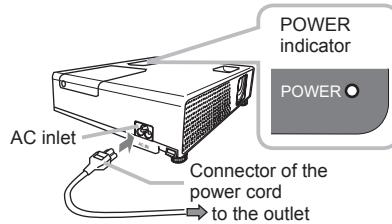
NOTE • When using the projector with a wired LAN, please remove the wireless network card.

IMPORTANT NOTE • To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

• When using wireless network card, please make sure to put the SD card slot cover onto projector top case to protect the card from electrostatic discharge influence.

Connecting power supply

1. Put the connector of the power cord into the AC inlet of the projector.
2. Firmly plug the power cord's plug into the outlet. In a couple of seconds after the power supply connection, the POWER indicator will light up in steady orange.



Please remember that when the AUTO ON function (38) activated, the connection of the power supply make the projector turn on.

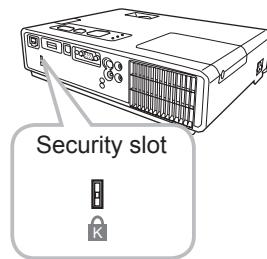
⚠WARNING ▶ Please use extra caution when connecting the power cord, as incorrect or faulty connections may result in fire and/or electrical shock.

- Only use the power cord that came with the projector. If it is damaged, contact your dealer to newly get correct one.
- Only plug the power cord into an outlet rated for use with the power cord's specified voltage range. The power outlet should be close to the projector and easily accessible. Remove the power cord for complete separation.
- Never modify the power cord.

Using the security slot

This product has the security slot for the Kensington lock. For details, see the manual of the security tool.

⚠WARNING ▶ Do not use the security slot to prevent the projector from falling down, since it is not designed for it.



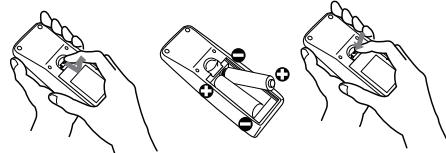
NOTE • The security slot is not comprehensive theft prevention measures. It is intended to be used as supplemental theft prevention measure.

Remote control

Putting batteries

Please set the batteries to the remote control before using it. If the remote control starts to malfunction, try to replace the batteries. If you will not use the remote control for long period, remove the batteries from the remote control and store them in a safe place.

1. Holding the hook part of the battery cover, remove it.
2. Align and insert the two AA batteries according to their plus and minus terminals as indicated in the remote control.
3. Replace the battery cover in the direction of the arrow and snap it back into place.



⚠WARNING ▶ Always handle the batteries with care and use them only as directed. Improper use may result in battery explosion, cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

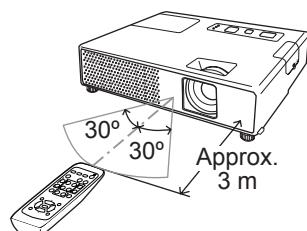
- Be sure to use only the batteries specified. Do not use batteries of different types at the same time. Do not mix a new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading a battery.
- Keep a battery away from children and pets.
- Do not recharge, short circuit, solder or disassemble a battery.
- Do not allow a battery in a fire or water. Keep batteries in a dark, cool and dry place.
- If you observe a leakage of a battery, wipe out the flower and then replace a battery. If the flower adheres your body or clothes, rinse well with water immediately.
- Obey the local laws on disposing the battery.

About the remote control signal

The remote control works with the projector's remote sensor. This projector has a remote sensor on the front.

The sensor senses the signal within the following range when the sensor is active:

60 degrees (30 degrees to the left and right of the sensor) within 3 meters about.



NOTE • The remote control signal reflected in the screen or the like may be available. If it is difficult to send the signal to the sensor directly, attempt to make the signal reflect.

- The remote control uses infrared light to send signals to the projector (Class 1 LED), so be sure to use the remote control in an area free from obstacles that could block the remote control's signal to the projector.
- The remote control may not work correctly if strong light (such as direct sun light) or light from an extremely close range (such as from an inverter fluorescent lamp) shines on the remote sensor of the projector. Adjust the position of projector avoiding those lights.

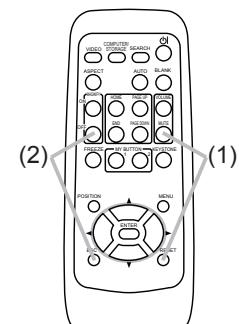
Changing the frequency of remote control signal

The accessory remote control has the two choices on signal frequency Mode 1:NORMAL and Mode 2:HIGH. If the remote control does not function properly, attempt to change the signal frequency.

In order to set the Mode, please keep pressing the combination of two buttons listed below simultaneously for about 3 seconds.

(1) Set to Mode 1:NORMAL... MUTE and RESET buttons
 (2) Set to Mode 2:HIGH... MAGNIFY OFF and ESC buttons

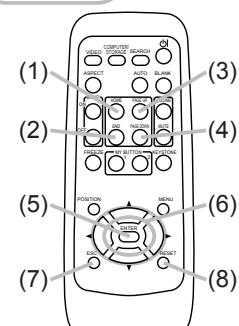
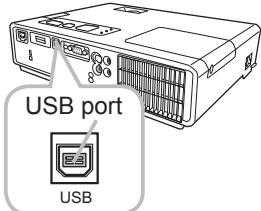
Please remember that the REMOTE FREQ. in the SERVICE item of the OPTION menu (42) of the projector to be controlled should be set to the same mode as the remote control.



Using as a simple PC mouse & keyboard

The enclosed remote control works as a simple mouse and keyboard of the PC, when the projector's USB port (B type) connects with the PC's USB port (A type) port via a mouse cable.

(1) **HOME key:** Press the HOME button.
 (2) **END key:** Press the END button.
 (3) **PAGE UP key:** Press the PAGE UP button.
 (4) **PAGE DOWN key:** Press the PAGE DOWN button.
 (5) **Mouse left button:** Press the ENTER button.
 (6) **Move pointer:** Use the cursor buttons ▲, ▼, ◀ and ▶.
 (7) **ESC key:** Press the ESC button.
 (8) **Mouse right button:** Press the RESET button.



CAUTION ▶ Improper use of the simple mouse & keyboard function could damage your equipment. While using this function, please connect this product only to a PC. Be sure to check your PC's manuals before connecting this product to the PC.

NOTE • When the simple mouse & keyboard function of this product does not work correctly, please check the following.

- When the mouse cable connects this projector with a PC having a built-in pointing device (e.g. track ball) like a notebook PC, open BIOS setup menu, then select the external mouse and disable the built-in pointing device, because the built-in pointing device may have priority to this function.
- Windows 95 OSR 2.1 or higher is required for this function. And also this function may not work depending on the PC's configurations and mouse drivers.
- You cannot do things like press two buttons at once (for instance, pressing two buttons at the same time to move the mouse pointer diagonally).
- This function is activated only when the projector is working properly. This function is not available while the lamp is warming up (the POWER indicator flashes green), and while adjusting the volume and display, correcting for keystone, zooming in on the screen, using the BLANK function, or displaying the menu screen.

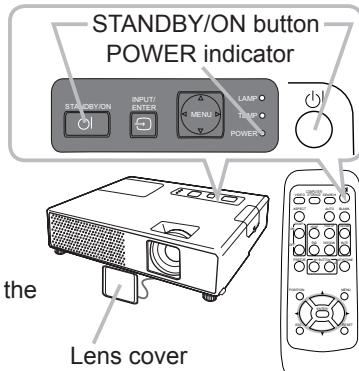
Power on/off

Turning on the power

1. Make sure that the POWER indicator turns in steady orange and the lens cover is removed.
2. Press the STANDBY/ON button on the projector or the remote control.

The projection lamp will light up and the POWER indicator will begin blinking in green. When the power is completely on, the indicator will stop blinking and light in steady green.

To display the picture, select an input signal according to the section "Selecting an input signal" (15).



Turning off the power

1. Press the STANDBY/ON button on the projector or the remote control. The message "Power off?" will appear on the screen for about 5 seconds.
2. Press the STANDBY/ON button again while the message appears. The projector lamp will go off, and the POWER indicator will begin blinking in orange. Then the POWER indicator will stop blinking and light in steady orange when the lamp cooling is complete.
3. Attach the lens cover, after the POWER indicator turns in steady orange. Do not turn the projector on for about 10 minutes after turning it off. Turning the projector on again too soon could shorten the lifetime of some consumable parts of the projector.

WARNING ▶ A strong light is emitted when the projector's power is on. Do not look into the lens of the projector or look inside of the projector through any of the projector's openings.

- ▶ Do not touch around the lamp cover and the exhaust vents during use or just after use, since it is too hot.
- ▶ Remove the power cord for complete separation.

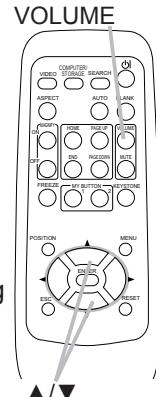
NOTE

- Please power on the projector prior to the connected devices. Power off the projector, after all of connected devices are powered off.
- This projector has the function that can make the projector automatically turn on/off. Please refer to the AUTO ON (38) and AUTO OFF (39) items of the OPTION menu.
- Use the shutdown switch (62) only when the projector is not turned off by normal procedure.

Operating

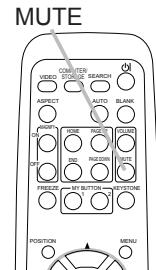
Adjusting the volume

1. Press the VOLUME button on the remote control.
A dialog will appear on the screen to aid you in adjusting the volume.
2. Use the **▲/▼** cursor buttons to adjust the volume.
To close the dialog and complete the operation, press the VOLUME button again. Even if you do not do anything, the dialog will automatically disappear after a few seconds.
- When **☒** is selected for the AUDIO item of the SETUP menu (■33), the volume adjustment is disable for MIU signal.



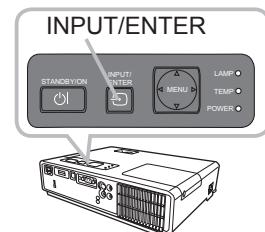
Temporarily muting the sound

1. Press the MUTE button on the remote control.
A dialog will appear on the screen indicating that you have muted the sound.
To restore the sound, press the MUTE or VOLUME button. Even if you do not do anything, the dialog will automatically disappear after a few seconds.
- When **☒** is selected for the AUDIO item of the SETUP menu (■33), the volume adjustment is disable.



Selecting an input signal

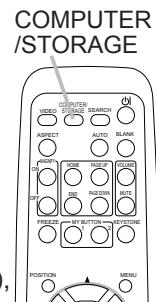
1. Press the INPUT/ENTER button on the projector.
Each time you press the button, the projector switches its input port as below.



1. Press the COMPUTER/STORAGE button on the remote control.
Each time you press the button, the projector switches its input port as below.



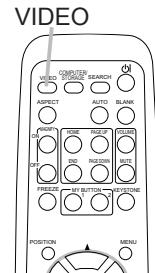
- If the COMPUTER/STORAGE button is pushed to switch from a signal from the VIDEO or S-VIDEO port, when TURN ON is selected for the AUTO SEARCH item in the OPTION menu (■38), the projector will check the COMPUTER IN port first. If no input is detected at the port, the projector will check other port in above order.



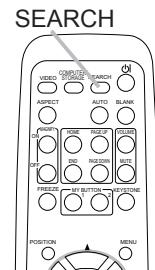
(continued on next page)

Selecting an input signal (continued)

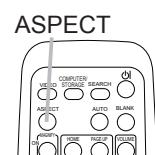
1. Press the VIDEO button on the remote control.
Each time you press the button, the projector switches its input port as below.
S-VIDEO ↔ VIDEO
 - If the VIDEO button is pushed to switch from a signal from the COMPUTER IN port or an MIU signal, when TURN ON is selected for the AUTO SEARCH item in the OPTION menu (38), the projector will check the S-VIDEO port first. If no input is detected at the port, the projector will check the VIDEO port.

**Searching an input signal**

1. Press the SEARCH button on the remote control.
The projector will start to check its input ports in order to find any input signals.
When an input is found, the projector will stop searching and display the image. If no signal is found, the projector will return to the state selected before the operation.

**Selecting an aspect ratio**

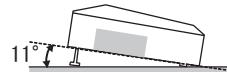
1. Press the ASPECT button on the remote control.
Each time you press the button, the projector switches the mode for aspect ratio in turn.
 - For a PC or MIU signal
NORMAL → 4:3 → 16:9 → SMALL
 - For a video signal, s-video signal or component video signal
4:3 → 16:9 → 14:9 → SMALL
 - For no signal
4:3 (fixed)
 - The ASPECT button does not work when no proper signal is inputted.
 - The NORMAL mode keeps the original aspect ratio setting.
 - Performing the automatic adjustment initializes the aspect ratio setting.



Adjusting the projector's elevator

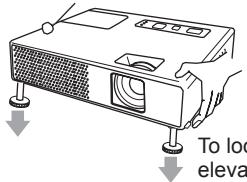
When the place to put the projector is slightly uneven to the left or right, use the elevator feet to place the projector horizontally.

Using the feet can also tilt the projector in order to project at a suitable angle to the screen, elevating the front side of the projector within 11 degrees.

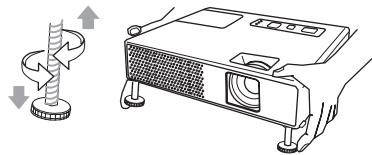


This projector has 2 elevator feet and 2 elevator knobs. An elevator foot is adjustable while pulling up the elevator knob on the same side as it.

1. Holding the projector, pull the elevator knobs up to loose the elevator feet.
2. Position the front side of the projector to the desired height.
3. Release the elevator knobs in order to lock the elevator feet.
4. After making sure that the elevator feet are locked, put the projector gently.
5. If necessary, the elevator feet can be manually twisted to make more precise adjustments. Hold the projector when twisting the feet.



To loose an elevator foot, pull up the elevator knob on the same side as it.



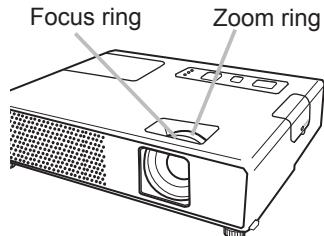
To finely adjust, twist the foot.

CAUTION ▶ Do not handle the elevator knobs without holding the projector, since the projector may drop down.

▶ Do not tilt the projector other than it elevating its front within 11 degrees using the adjuster feet. A tilt of the projector exceeding the restriction could cause malfunction or shortening the lifetime of consumables, or the projector itself.

Adjusting the zoom and focus

1. Use the zoom ring to adjust the screen size.
2. Use the focus ring to focus the picture.

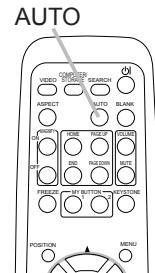


Using the automatic adjustment feature

1. Press the AUTO button on the remote control.
Pressing this button performs the following.

○ For a PC signal

The vertical position, the horizontal position, the horizontal phase and the horizontal size will be automatically adjusted. And the aspect ratio will be automatically set to default. Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.



○ For an MIU signal

The aspect ratio will be automatically set to the default.

○ For a video signal, s-video signal or component video signal

The video format best suited for the respective input signal will be selected automatically. This function is available only when the AUTO is selected for the VIDEO FORMAT item in the INPUT menu (20).

The vertical position, horizontal position and aspect ratio will be automatically set to the default. For a component video signal, also the horizontal phase will be automatically set to the default.

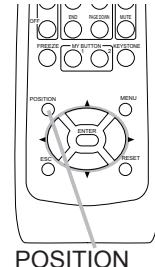
- The automatic adjustment operation requires about 10 seconds. Also please note that it may not function correctly with some input. When this function is performed for a video signal, a certain extra such as a line may appear outside a picture.

Adjusting the position

1. Press the POSITION button on the remote control.
The "POSITION" indication will appear on the screen.
2. Use the ▲/▼/◀/▶ cursor buttons to adjust the picture position.

When you want to reset the operation, press the RESET button on the remote control during the operation.

To complete this operation, press the POSITION button again. Even if you do not do anything, the dialog will automatically disappear after a few seconds.



- The POSITION button does not work for an MIU signal.
- When this function is performed on a video signal, s-video signal or component video signal, some image such as an extra-line may appear at outside of the picture.
- When this function is performed on a video signal, s-video signal, or component video signal, the range of this adjustment depends on the OVER SCAN in the IMAGE menu (27) setting. It is not possible to adjust when the OVER SCAN is set to 10.

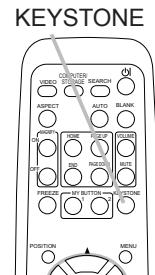
Correcting the keystone distortions

1. Press the KEYSTONE button on the remote control. A dialog will appear on the screen to aid you in correcting the distortion.

2. Use the ▲/▼ cursor buttons to select the AUTO or MANUAL operation, and press the ► button to perform the following.

- (1) The AUTO executes automatic vertical keystone correction.
- (2) The MANUAL displays a dialog for keystone correction. Use the ▲/▼ buttons for adjustment.

To close the dialog and complete this operation, press the KEYSTONE button again. Even if you do not do anything, the dialog will automatically disappear after a few seconds.



- The adjustable range of this correction will vary among inputs. For some input, this function may not work well.
- When V:INVERT or H&V:INVERT is selected to the MIRROR item in the SETUP menu, if the projector screen is inclined or angled downward, this function may not work correctly.
- When the zoom adjustment is set to the TELE (telephoto focus), the automatic keystone distortion correction may be excessive. This function should be used when the zoom adjustment is set to the full WIDE (wide-angle focus) whenever possible.
- When the projector is placed on the level (about $\pm 0^\circ$), the automatic keystone distortion correction may not work.
- When the projector is inclined to near ± 30 degree or over, this function may not work well.
- This function will be unavailable when Transition Detector is on (47).

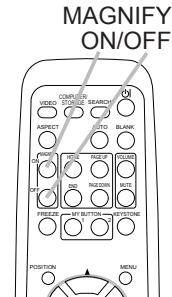
Using the magnify feature

1. Press the ON button of MAGNIFY on the remote control. The "MAGNIFY" indication will appear on the screen (although the indication will disappear in several seconds with no operation), and the projector will go into the MAGNIFY mode.

2. Use the ▲/▼ cursor buttons to adjust the zoom level.

To move the zoom area, press the POSITION button in the MAGNIFY mode, then use the ▲/▼/◀/▶ cursor buttons to move the area. And to finalize the zoom area, press the POSITION button again.

To exit from the MAGNIFY mode and restore the screen to normal, press the OFF button of MAGNIFY on the remote control.



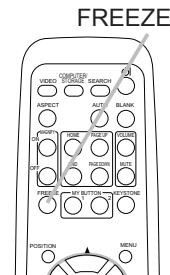
- The projector automatically exits from the MAGNIFY mode when the input signal is changed, or when the display condition is changed.
- Although in the MAGNIFY mode, the keystone distortion condition may vary, it will be restored when the projector exits from the MAGNIFY mode.

NOTE • The zoom level can be finely adjusted. Closely watch the screen to find the level you want.

Freezing the screen

1. Press the FREEZE button on the remote control.
The “FREEZE” indication will appear on the screen (although the indication will not appear when the TURN ON is selected to the MESSAGE item of the SCREEN menu (図37)), and the projector will go into the FREEZE mode.
To exit the FREEZE mode and restore the screen to normal, press the FREEZE button again.

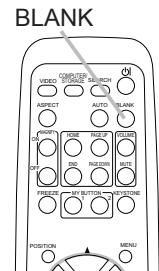
- The projector automatically exits from the FREEZE mode when one of the projector’s buttons or remote control buttons of STANDBY/ON, SEARCH, COMPUTER/STORAGE, VIDEO, BLANK, AUTO, VOLUME, MUTE, KEYSTONE, MENU, MAGNIFY and MY BUTTON1/2(except MyMemory or PICTURE MODE is assigned to) (図40) is pressed.
- If the projector continues projecting a still image for a long time, the LCD panel might possibly be burned in. Do not leave the projector in the FREEZE mode for too long.



Temporarily blanking the screen

1. Press the BLANK button on the remote control.
The blank screen will be displayed instead of the screen of input signal. Please refer to the BLANK item in the SCREEN menu (図34).
To exit from the blank screen and return to the input signal screen, press the BLANK button again.

- The projector automatically returns to the input signal screen when one of the projector’s buttons or the remote control buttons (except ASPECT, POSITION, MAGNIFY or FREEZE button, also except MY BUTTON1/2 if AUTO KEYSTONE or MyMemory or PICTURE MODE is assigned on these buttons (図40)) is pressed.

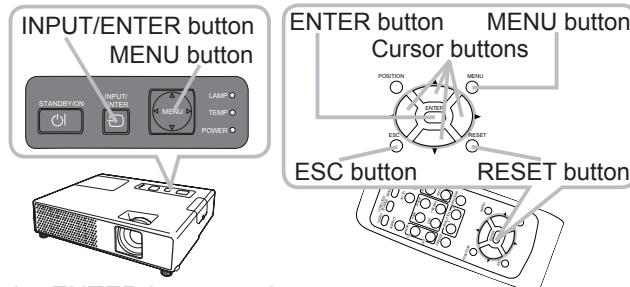


NOTE • The sound is not connected with the blank screen function. If necessary, set the volume or mute first.

Using the menu function

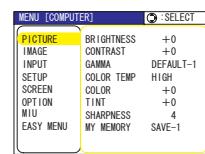
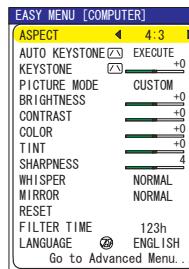
This projector has the following menus: PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION, MIU and EASY MENU. EASY MENU consists of functions often used, and the other menus are classified into each purpose. Each of these menus is operated using the same methods. The basic operations of these menus are as follows.

1. Press the MENU button on the remote control or the projector. The Advanced MENU, or EASY MENU that has priority just after powered on, will appear. While the projector is displaying any menu, the INPUT/ENTER button on the projector works as the ENTER button and the MENU button on the projector works as the cursor buttons.



In the EASY MENU

2. If you want to change it to the Advanced Menu, select the "Go to Advanced Menu..."
3. Use the ▲/▼ cursor buttons to select an item to operate.
4. Use the ◀/▶ cursor buttons to operate the item.



In the Advanced Menu

2. Use the ▲/▼ cursor buttons to select a menu. If you want to change it to the EASY MENU, select the EASY MENU. Then press the ▶ cursor button, or the ENTER button to select an item. The lower layer menu of the selected item will appear.
3. Use the ▲/▼ cursor buttons to select an item to operate. Then press the ▶ cursor button, or the ENTER button to progress. The operation menu of the selected item will appear.
4. Use the ▲/▼ cursor buttons to operate the item.

Some functions cannot be performed when a certain input port is selected, or when a certain input signal is displayed.

When you want to reset the operation, press the RESET button on the remote control during the operation. Note that some items (ex. LANGUAGE, H PHASE, VOLUME) cannot be reset.

In the Advanced Menu, when you want to return to the previous display, press the ◀ cursor button, or the ESC button on the remote control.

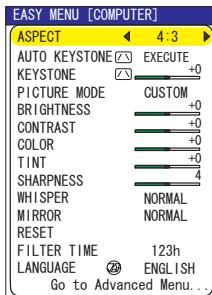
5. Press the MENU button on the remote control again to close the menu and complete this operation. Even if you do not do anything, the dialog will automatically disappear after about 10 seconds.

EASY MENU

EASY MENU

From the EASY MENU, items shown in the table below can be performed.

Select an item using the ▲/▼ cursor buttons. Then perform it according to the following table.



Item	Description																					
ASPECT	Using the ▲/▼ buttons switches the mode for aspect ratio. See the ASPECT item in IMAGE menu (27).																					
AUTO KEYSTONE	Using the ► button executes the auto keystone function. See the AUTO KEYSTONE EXECUTE item in SETUP menu (32).																					
KEYSTONE	Using the ▲/▼ buttons corrects the vertical keystone distortion. See the KEYSTONE item in SETUP menu (32).																					
PICTURE MODE	<p>Using the ▲/▼ buttons switches the picture mode. The picture modes are combinations of GAMMA and COLOR TEMP settings. Choose a suitable mode according to the projected source.</p> <p style="text-align: center;">→ NORMAL ⇔ CINEMA ⇔ DYNAMIC ←</p> <p style="text-align: center;">↓ WHITEBOARD ⇔ BOARD(GREEN) ⇔ BOARD(BLACK) ←</p> <table border="1"><thead><tr><th></th><th>COLOR TEMP</th><th>GAMMA</th></tr></thead><tbody><tr><td>NORMAL</td><td>MID DEFAULT</td><td>#1 DEFAULT</td></tr><tr><td>CINEMA</td><td>LOW DEFAULT</td><td>#2 DEFAULT</td></tr><tr><td>DYNAMIC</td><td>HIGH DEFAULT</td><td>#3 DEFAULT</td></tr><tr><td>BOARD(BLACK)</td><td>Hi-BRIGHT-1 DEFAULT</td><td>#4 DEFAULT</td></tr><tr><td>BOARD(GREEN)</td><td>Hi-BRIGHT-2 DEFAULT</td><td>#4 DEFAULT</td></tr><tr><td>WHITEBOARD</td><td>MID DEFAULT</td><td>#5 DEFAULT</td></tr></tbody></table> <ul style="list-style-type: none">When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the PICTURE MODE is "CUSTOM". Please refer to the GAMMA (24) and COLOR TEMP (25) items in PICTURE menu.When this function is performed, a certain extra such as a line may appear.		COLOR TEMP	GAMMA	NORMAL	MID DEFAULT	#1 DEFAULT	CINEMA	LOW DEFAULT	#2 DEFAULT	DYNAMIC	HIGH DEFAULT	#3 DEFAULT	BOARD(BLACK)	Hi-BRIGHT-1 DEFAULT	#4 DEFAULT	BOARD(GREEN)	Hi-BRIGHT-2 DEFAULT	#4 DEFAULT	WHITEBOARD	MID DEFAULT	#5 DEFAULT
	COLOR TEMP	GAMMA																				
NORMAL	MID DEFAULT	#1 DEFAULT																				
CINEMA	LOW DEFAULT	#2 DEFAULT																				
DYNAMIC	HIGH DEFAULT	#3 DEFAULT																				
BOARD(BLACK)	Hi-BRIGHT-1 DEFAULT	#4 DEFAULT																				
BOARD(GREEN)	Hi-BRIGHT-2 DEFAULT	#4 DEFAULT																				
WHITEBOARD	MID DEFAULT	#5 DEFAULT																				

(continued on next page)

EASY MENU (continued)

Item	Description
BRIGHTNESS	Using the ◀/▶ buttons adjusts the brightness. See the BRIGHTNESS item in PICTURE menu (24).
CONTRAST	Using the ◀/▶ buttons adjusts the contrast. See the CONTRAST item in PICTURE menu (24).
COLOR	Using the ◀/▶ buttons adjusts the strength of whole color. See the COLOR item in PICTURE menu (25).
TINT	Using the ◀/▶ buttons adjusts the tint. See the TINT item in PICTURE menu (25).
SHARPNESS	Using the ◀/▶ buttons adjusts the sharpness. See the SHARPNESS item in PICTURE menu (25).
WHISPER	Using the ◀/▶ buttons turns off/on the whisper mode. See the WHISPER item in SETUP menu (33).
MIRROR	Using the ◀/▶ buttons switches the mode for mirror status. See the MIRROR item in SETUP menu (33).
RESET	Performing this item resets all of the EASY MENU items except the FILTER TIME and LANGUAGE. A dialog is displayed for confirmation. Selecting the RESET using the ▲ button performs resetting.
FILTER TIME	Performing this item resets the filter time which counts usage time of the air filter. A dialog is displayed for confirmation. Selecting the RESET using the ▲ button performs resetting. See the FILTER TIME item in OPTION menu (39).
LANGUAGE	Using the ◀/▶ buttons changes the display language. See the LANGUAGE item in SCREEN menu (34).
Go to Advanced Menu...	Select “Go to Advanced Menu...” on the menu, and press the ▶ or ENTER button to use the menu of PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION or MIU.

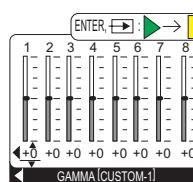
PICTURE Menu

PICTURE Menu

From the PICTURE menu, items shown in the table below can be performed.

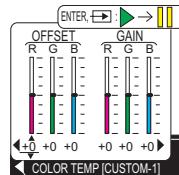
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or ENTER button to execute the item. Then perform it according to the following table.

MENU [COMPUTER]		SELECT
PICTURE	BRIGHTNESS	+0
IMAGE	CONTRAST	+0
INPUT	GAMMA	DEFAULT-1
SETUP	COLOR TEMP	HIGH
SCREEN	COLOR	+0
OPTION	TINT	+0
MIU	SHARPNESS	4
EASY MENU	MY MEMORY	SAVE-1

Item	Description
BRIGHTNESS	Using the $\blacktriangle/\blacktriangledown$ buttons adjusts the brightness. Light \Leftrightarrow Dark
CONTRAST	Using the $\blacktriangle/\blacktriangledown$ buttons adjusts the contrast. Strong \Leftrightarrow Weak
GAMMA	<p>Using the $\blacktriangle/\blacktriangledown$ buttons switches the gamma mode.</p> <p>#1 DEFAULT \Leftrightarrow #1 CUSTOM \Leftrightarrow #2 DEFAULT \Leftrightarrow #2 CUSTOM \Leftrightarrow #3 DEFAULT \uparrow \downarrow #5 CUSTOM \Leftrightarrow #5 DEFAULT \Leftrightarrow #4 CUSTOM \Leftrightarrow #4 DEFAULT \Leftrightarrow #3 CUSTOM \uparrow \downarrow</p> <p>To adjust CUSTOM</p> <p>Selecting a mode whose name includes CUSTOM and then pressing the \blacktriangleright button or the ENTER button displays a dialog to aid you in adjusting the mode.</p> <p>This function is useful when you want to change the brightness of particular tones.</p> <p>Choose an item using the $\blacktriangle/\blacktriangleright$ buttons, and adjust the level using the $\blacktriangle/\blacktriangledown$ buttons.</p> <p>You can display a test pattern for checking the effect of your adjustment by pressing the ENTER button. Each time you press the ENTER button, the pattern changes as below.</p> <p>No pattern \Rightarrow Gray scale of 9 steps \Rightarrow \uparrow \Rightarrow Ramp \Leftrightarrow Gray scale of 15 steps</p> <p>The eight equalizing bars correspond to eight tone levels of the test pattern except the darkest in the left end. If you want to adjust the 2nd tone from left end on the test pattern (Gray scale of 9 steps), use the equalizing adjustment bar "1". The darkest tone at the left end of the test pattern cannot be controlled with any of equalizing adjustment bar.</p> <ul style="list-style-type: none"> When this function is performed, lines or other distortion may appear. 

(continued on next page)

PICTURE Menu (continued)

Item	Description
COLOR TEMP	<p>Using the ▲/▼ buttons switches the color temperature mode.</p> <p>HIGH DEFAULT ⇄ HIGH CUSTOM ⇄ MID DEFAULT ⇄ MID CUSTOM ⇄ ↴ LOW DEFAULT ⇄ LOW CUSTOM ⇄ HI-BRIGHT-1 DEFAULT ⇄ HI-BRIGHT-1 CUSTOM ⇄ ↴ HI-BRIGHT-2 DEFAULT ⇄ HI-BRIGHT-2 CUSTOM ⇄</p> <p>To adjust CUSTOM</p> <p>Selecting a mode whose name includes CUSTOM and then pressing the ▶ button or the ENTER button displays a dialog to aid you in adjusting the OFFSET and GAIN of the selected mode.</p> <p>OFFSET adjustments change the color intensity on the whole tones of the test pattern.</p> <p>GAIN adjustments mainly affect color intensity on the brighter tones of the test pattern.</p> <p>Choose an item using the ◀/▶ buttons, and adjust the level using the ▲/▼ buttons.</p> <p>You can display a test pattern for checking the effect of your adjustment by pressing the ENTER button. Each time you press the ENTER button, the pattern changes as below.</p> <p>No pattern ⇄ Gray scale of 9 steps ⇄ ↑ Ramp ⇄ Gray scale of 15 steps</p> <ul style="list-style-type: none"> When this function is performed, lines or other distortion may appear. 
COLOR	<p>Using the ▲/▼ buttons adjusts the strength of whole color.</p> <p>Strong ⇄ Weak</p> <ul style="list-style-type: none"> This item can be selected only for a video signal, s-video or component video signal.
TINT	<p>Using the ▲/▼ buttons adjusts the tint.</p> <p>Greenish ⇄ Reddish</p> <ul style="list-style-type: none"> This item can be selected only for a video signal, s-video or component video signal.
SHARPNESS	<p>Using the ▲/▼ buttons adjusts the sharpness.</p> <p>Strong ⇄ Weak</p> <ul style="list-style-type: none"> There may be some noise and/or the screen may flicker for a moment when an adjustment is made. This is not a malfunction.

(continued on next page)

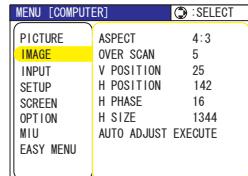
PICTURE Menu (continued)

Item	Description
MY MEMORY	<p>This projector has 4 memories for adjustment data (for all the items of the PICTURE menu). Selecting a function using the $\blacktriangle/\blacktriangledown$ buttons and pressing the \blacktriangleright or ENTER button performs each function.</p> <p style="text-align: center;">\blacktriangleright LOAD1 \Leftrightarrow LOAD2 \Leftrightarrow LOAD3 \Leftrightarrow LOAD4 \blacktriangleleft \blacktriangleright SAVE4 \Leftrightarrow SAVE3 \Leftrightarrow SAVE2 \Leftrightarrow SAVE1 \blacktriangleleft</p> <p><u>LOAD1, LOAD2, LOAD3, LOAD4</u></p> <p>Performing a LOAD function loads the data from the memory linked in the number included in the function's name, and adjusts the picture automatically depending on the data.</p> <ul style="list-style-type: none"> • The LOAD functions whose linked memory has no data are skipped. • Remember that the current adjusted condition will be lost by loading data. If you want to keep the current adjustment, please save it before performing a LOAD function. • There may be some noise and the screen may flicker for a moment when loading data. This is not malfunction. • The LOAD functions can be also performed by the MY MEMORY button which can be set by the MY BUTTON item in OPTION menu (40). <p><u>SAVE1, SAVE2, SAVE3, SAVE4</u></p> <p>Performing a SAVE function saves the current adjustment data into the memory linked in the number included in the function's name.</p> <ul style="list-style-type: none"> • Remember that the current data being stored of a memory will be lost by saving a new data into the memory.

IMAGE Menu

From the IMAGE menu, items shown in the table below can be performed.

Select an item using the **▲/▼** cursor buttons, and press the **►** cursor button or ENTER button to execute the item. Then perform it according to the following table.



Item	Description
ASPECT	<p>Using the ▲/▼ buttons switches the mode for aspect ratio.</p> <p>For a PC and MIU signal $4:3 \Leftrightarrow 16:9 \Leftrightarrow 14:9 \Leftrightarrow 10:9 \Leftrightarrow 10:7 \Leftrightarrow 10:5 \Leftrightarrow 10:3 \Leftrightarrow 10:2 \Leftrightarrow 10:1$</p> <p>For a Video signal, s-video signal or component video signal $4:3 \Leftrightarrow 16:9 \Leftrightarrow 14:9 \Leftrightarrow 10:9 \Leftrightarrow 10:7 \Leftrightarrow 10:5 \Leftrightarrow 10:3 \Leftrightarrow 10:2 \Leftrightarrow 10:1$</p> <p>For no signal 4:3 (fixed)</p> <ul style="list-style-type: none"> This item can be selected only for a proper signal. The NORMAL mode keeps the original aspect ratio setting. Performing the automatic adjustment initializes the aspect ratio setting.
OVER SCAN	<p>Using the ▲/▼ buttons adjusts the over-scan ratio.</p> <p>Large (It reduces picture) \Leftrightarrow Small (It magnifies picture)</p> <ul style="list-style-type: none"> This item can be selected only for a video, s-video and component video signal. When this adjustment is too large, certain degradation may appear at the frame area of the picture. In such a case, please adjust small.
V POSITION	<p>Using the ▲/▼ buttons adjusts the vertical position.</p> <p>Up \Leftrightarrow Down</p> <ul style="list-style-type: none"> This item cannot be selected for an MIU signal. Over-adjusting the vertical position may cause noise to appear on the screen. If this occurs please reset the vertical position to the default setting. Pressing the RESET button when the V POSITION is selected will reset the V POSITION to the default setting. When this function is performed on a video signal, s-video signal, or component video signal, the range of this adjustment depends on the OVER SCAN ( above) setting. It is not possible to adjust when the OVER SCAN is set to 10.
H POSITION	<p>Using the ▲/▼ buttons adjusts the horizontal position.</p> <p>Left \Leftrightarrow Right</p> <ul style="list-style-type: none"> This item cannot be selected for an MIU signal. Over-adjusting the horizontal position may cause noise to appear on the screen. If this occurs please reset the horizontal position to the default setting. Pressing the RESET button when the H POSITION is selected will reset the H POSITION to the default setting. When this function is performed on a video signal, s-video signal, or component video signal, the range of this adjustment depends on the OVER SCAN ( above) setting. It is not possible to adjust when the OVER SCAN is set to 10.

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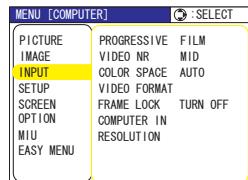
IMAGE Menu (continued)

Item	Description
H PHASE	<p>Using the ▲/▼ buttons adjusts the horizontal phase to eliminate flicker. Right \Leftrightarrow Left</p> <ul style="list-style-type: none"> • This item can be selected only for a computer signal or component video signal.
H SIZE	<p>Using the ▲/▼ buttons adjusts the horizontal size. Large \Leftrightarrow Small</p> <ul style="list-style-type: none"> • This item can be selected only for a computer signal. • When this adjustment is excessive, the picture may not be displayed correctly. In such a case, please reset the adjustment by pressing the RESET button during this operation.
AUTO ADJUST EXECUTE	<p>Selecting this item performs the automatic adjustment feature.</p> <p>For a PC signal The vertical position, the horizontal position, the horizontal phase and the horizontal size (41) will be automatically adjusted. And the aspect ratio will be automatically set to the default. Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.</p> <p>For an MIU signal The aspect ratio will be automatically set to the default.</p> <p>For a video signal, s-video signal or component video signal The video format best suited for the respective input signal will be selected automatically. This function is available only when the AUTO mode is selected to the VIDEO FORMAT item in INPUT menu (30). The vertical position, horizontal position and aspect ratio will be automatically set to the the default. For a component video signal, also the horizontal phase will be automatically set to the default.</p> <ul style="list-style-type: none"> • The automatic adjustment operation requires about 10 seconds. Also please note that it may not function correctly with some input.

INPUT Menu

From the INPUT menu, items shown in the table below can be performed.

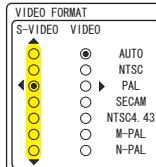
Select an item using the **▲/▼** cursor buttons, and press the **►** cursor button or ENTER button to execute the item. Then perform it according to the following table.



Item	Description
PROGRESSIVE	<p>Using the ▲/▼ buttons switches the progress mode. TV \Leftrightarrow FILM \Leftrightarrow TURN OFF</p> <ul style="list-style-type: none"> • This function is performed only for an interlaced signal of a video, s-video or component video of 525i (480i) or 625i (576i) signal. • When TV or FILM is selected, the screen image will be sharp. FILM adapts to the 2-3 Pull-Down conversion system. But these may cause a certain defect (for example, jagged line) of the picture for a quick moving object. In such a case, please select TURN OFF, even though the screen image may lose the sharpness.
VIDEO NR	<p>Using the ▲/▼ buttons switches the noise reduction mode. HIGH \Leftrightarrow MID \Leftrightarrow LOW</p> <ul style="list-style-type: none"> • This function performs only for a video, s-video or component video of 525i(480i) or 625i(576i) signal. • When this function is excessive, it may cause a certain degradation of the picture.
COLOR SPACE	<p>Using the ▲/▼ buttons switches the mode for color space. AUTO \Leftrightarrow RGB \Leftrightarrow SMPTE240 \Leftrightarrow REC709 \Leftrightarrow REC601</p> <ul style="list-style-type: none"> • This item can be selected only for a computer signal, component video signal or MIU signal. • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well at some signals. In such a case, it might be good to select a suitable mode except AUTO.

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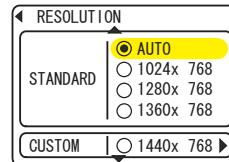
INPUT Menu (continued)

Item	Description
VIDEO FORMAT	<p>Set the video format for the s-video port and video port.</p> <p>(1) Use the ◀/▶ buttons to select the input port.</p> <p>(2) Using the ▲/▼ buttons switches the mode for video format.</p> <p>AUTO ⇄ NTSC ⇄ PAL ⇄ SECAM ↳ N-PAL ⇄ M-PAL ⇄ NTSC4.43 ↳</p> <ul style="list-style-type: none"> • This item is performed only for a video signal from the VIDEO port or the S-VIDEO port. • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well for some signals. If the picture becomes unstable (e.g. an irregular picture, lack of color), please select the mode according to the input signal. 
FRAME LOCK	<p>Using the ▲/▼ buttons turns the frame lock function on/off.</p> <p>TURN ON ⇄ TURN OFF</p> <ul style="list-style-type: none"> • This item can be performed only on a computer signal with a vertical frequency of 50 to 60 Hz. • When the TURN ON is selected, a moving pictures are displayed more smoothly. • This function may cause a certain degradation of the picture. In such a case, please select the TURN OFF.
COMPUTER IN	<p>Set the computer input signal type for the ports of COMPUTER. Use the ▲/▼ buttons to select the computer input signal type.</p> <p>AUTO ⇄ SYNC ON G OFF</p> <p>Sync on Green signal can be supported, if AUTO is selected.</p> <ul style="list-style-type: none"> • When the AUTO is selected, the picture may be distorted with certain input signals. In such a case, remove the signal connector first and select SYNC ON G OFF on the menu, and then reconnect the signal. • Component signal can be supported through COMPUTER IN port, if AUTO is selected for the COMPUTER IN port.

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INPUT Menu (continued)

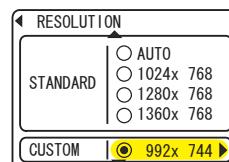
Item	Description
RESOLUTION	<p>The resolution for the COMPUTER IN input signals can be set on this projector.</p> <p>(1) In the INPUT menu select the RESOLUTION using the ▲/▼ buttons and press the ▶ button. The RESOLUTION menu will be displayed.</p> <p>(2) In the RESOLUTION menu, select the resolution you wish to display using the ▲/▼ buttons. Selecting AUTO will set a resolution appropriate to the input signal.</p> <p>(3) Pressing the ▶ or ENTER button when selecting a STANDARD resolution will automatically adjust the horizontal and vertical positions, clock phase and horizontal size and automatically select an aspect ratio. The INFORMATION dialog (42) will be displayed.</p> <p>(4) To set a custom resolution use the ▲/▼ buttons to select the CUSTOM and the CUSTOM RESOLUTION box will be displayed. Set the horizontal (HORZ) and vertical (VERT) resolutions using the ▲/▼/◀/▶ buttons. Although not all resolutions are guaranteed.</p> <p>(5) To save the setting place the cursor on the right-most digit and press the ▶ button. The horizontal and vertical positions, clock phase and horizontal size will be automatically adjusted and an aspect ratio will be automatically selected.</p> <p>(6) To revert back to the previous resolution without saving changes place the cursor on the left-most digit and press the ◀ button. The screen will then return to the RESOLUTION menu displaying the previous resolution.</p> <ul style="list-style-type: none"> • For some pictures, this function may not work well.



COMPUTER
1280x 768 @ 60



COMPUTER
992x 744 @ 60



SETUP Menu

SETUP Menu

From the SETUP menu, items shown in the table below can be performed.

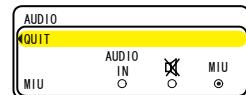
Select an item using the **▲/▼** cursor buttons, and press the **►** cursor button or the ENTER button to execute the item. Then perform it according to the following table.

MENU [COMPUTER]	
PICTURE	AUTO KEYSTONE <input checked="" type="checkbox"/> EXECUTE
IMAGE	KEYSTONE +0
INPUT	WHISPER NORMAL
SETUP	MIRROR NORMAL
SCREEN	VOLUME 16
OPTION	AUDIO
MIU	
EASY MENU	

Item	Description
AUTO KEYSTONE <input checked="" type="checkbox"/> EXECUTE	Selecting this item performs the automatic keystone distortion correction. Projector automatically corrects vertical keystone distortion due to the (forward/backward) setup angle by itself. This function will be executed only once when selected in the menu. When the slant of the projector is changed, execute this function again. <ul style="list-style-type: none">• The adjustable range for correction will vary among inputs. For some input, this function may not work well.• When V:INVERT or H&V:INVERT is selected to the MIRROR item in the SETUP menu, if the projector screen is inclined or angled downward, this function may not work correctly.• When the zoom adjustment is set to the TELE (telephoto focus), this function may be excessive. This function should be used when the zoom adjustment is set to the full WIDE (wide-angle focus) whenever possible.• When the projector is placed on the level (about $\pm 0^\circ$), this function may not work.• When the projector is inclined to near ± 30 degree or over, this function may not work well.• This function will be unavailable when the Transition Detector is on (47).
KEYSTONE	Using the ▲/▼ buttons corrects the vertical keystone distortion. Shrink the top of the image ⇔ Shrink the bottom of the image <ul style="list-style-type: none">• The adjustable range of this function will vary with the type of input signal. For some input, this function may not work well.• This function will be unavailable when the Transition Detector is on (47).

(continued on next page)

SETUP Menu (continued)

Item	Description
WHISPER	<p>Using the ▲/▼ buttons turns off/on the whisper mode.</p> <p>NORMAL ⇔ WHISPER</p> <ul style="list-style-type: none"> When the WHISPER is selected, acoustic noise and screen brightness are reduced.
MIRROR	<p>Using the ▲/▼ buttons switches the mode for mirror status.</p>  <p>NORMAL ⇔ H:INVERT ⇔ V:INVERT ⇔ H&V:INVERT</p> <p>If the Transition Detector is TURN ON and MIRROR status is changed, Transition Detector Alarm (47) will be displayed when projector is restarted after the power switch is turned off.</p>
VOLUME	<p>Using the ▲/▼ buttons adjusts the volume.</p> <p>High ⇔ Low</p>
AUDIO	<p>Allocates an audio port for an MIU signal.</p> <p>(1) Press the ▼ button to begin to select.</p> <p>(2) Use the ◀/▶ buttons to select an Audio port for an MIU signal.</p> <p>AUDIO IN ⇔  ⇔ MIU</p> <ul style="list-style-type: none"> This setting is effective only when an MIU signal is selected. 

SCREEN Menu

From the SCREEN menu, items shown in the table below can be performed.

Select an item using the **▲/▼** cursor buttons, and press the **▶** cursor button or ENTER button to execute the item. Then perform it according to the following table.

MENU [COMPUTER]	
PICTURE	LANGUAGE  ENGLISH
IMAGE	MENU POSITION
INPUT	BLACK
SETUP	ORIGINAL
SCREEN	MyScreen
OPTION	MyScreen Lock
MIU	TURN OFF
EASY MENU	MESSAGE
	TURN ON
	SOURCE NAME

Item	Description								
LANGUAGE	<p>Using the ▲/▼ buttons switches the OSD (On Screen Display) language.</p> <p>ENGLISH ⇄ FRANÇAIS ⇄ DEUTSCH ⇄ ESPAÑOL ⇄ ITALIANO ↓ NORSK ⇄ NEDERLANDS ⇄ PORTUGUÊS ⇄ 日本語 ↓ 简体中文 ⇄ 繁體中文 ⇄ 한글 ⇄ SVENSKA ⇄ РУССКИЙ ↓ SUOMI ⇄ POLSKI ⇄ TÜRKÇE ↓</p>								
MENU POSITION	<p>Using the ▲/▼/◀/▶ buttons adjusts the menu position.</p> <p>To quit the operation, press the MENU button on the remote control or keep no operation for about 10 seconds.</p>								
BLANK	<p>Using the ▲/▼ buttons switches the mode for the blank screen. The blank screen is a screen for the temporarily blanking feature (20). It is displayed by pressing the BLANK button.</p> <p>MyScreen ⇄ ORIGINAL ⇄ BLUE ⇄ WHITE ⇄ BLACK</p> <table border="1" data-bbox="317 997 1011 1165"> <thead> <tr> <th></th> <th>Feature</th> </tr> </thead> <tbody> <tr> <td>MyScreen</td> <td>Screen can be registered by the MyScreen item (36).</td> </tr> <tr> <td>ORIGINAL</td> <td>Screen preset as the standard screen.</td> </tr> <tr> <td>BLUE, WHITE, BLACK</td> <td>Plain screens in each color.</td> </tr> </tbody> </table> <p>• To avoid remaining as an afterimage, the MyScreen or ORIGINAL screen will change to the plain black screen after several minutes.</p>		Feature	MyScreen	Screen can be registered by the MyScreen item (36).	ORIGINAL	Screen preset as the standard screen.	BLUE, WHITE, BLACK	Plain screens in each color.
	Feature								
MyScreen	Screen can be registered by the MyScreen item (36).								
ORIGINAL	Screen preset as the standard screen.								
BLUE, WHITE, BLACK	Plain screens in each color.								

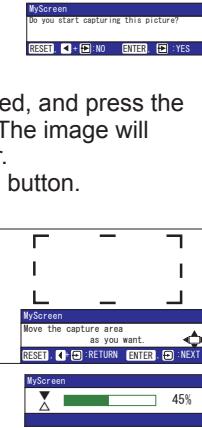
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SCREEN Menu (continued)

Item	Description								
START UP	<p>Using the ▲/▼ buttons switches the mode for the start-up screen. The start-up screen is a screen displayed when no signal or an unsuitable signal is detected.</p> <p>MyScreen ⇄ ORIGINAL ⇄ TURN OFF</p>  <table border="1" data-bbox="308 347 1008 482"> <thead> <tr> <th data-bbox="308 347 521 373"> </th><th data-bbox="521 347 1008 373">Feature</th></tr> </thead> <tbody> <tr> <td data-bbox="308 373 521 422">MyScreen</td><td data-bbox="521 373 1008 422">Screen can be registered by the MyScreen item (36).</td></tr> <tr> <td data-bbox="308 422 521 449">ORIGINAL</td><td data-bbox="521 422 1008 449">Screen preset as the standard screen.</td></tr> <tr> <td data-bbox="308 449 521 482">TURN OFF</td><td data-bbox="521 449 1008 482">Plain black screen.</td></tr> </tbody> </table> <ul style="list-style-type: none"> • To avoid remaining as an afterimage, the MyScreen or ORIGINAL screen will change to the BLANK screen (34) after several minutes. If also the BLANK screen is the MyScreen or ORIGINAL, the plain black screen is instead used. • When the TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION menu (44), the START UP is fixed to MyScreen. 		Feature	MyScreen	Screen can be registered by the MyScreen item (36).	ORIGINAL	Screen preset as the standard screen.	TURN OFF	Plain black screen.
	Feature								
MyScreen	Screen can be registered by the MyScreen item (36).								
ORIGINAL	Screen preset as the standard screen.								
TURN OFF	Plain black screen.								

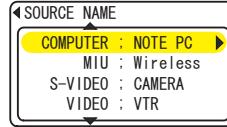
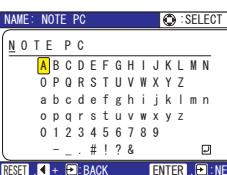
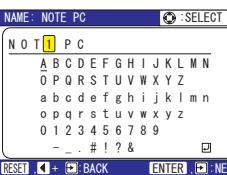
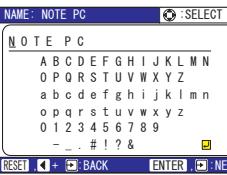
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SCREEN Menu (continued)

Item	Description
MyScreen	<p>This item allows you to capture an image for use as a MyScreen image which can be used as the BLANK screen and START UP screen. Display the image you want to capture before executing the following procedure.</p> <p>1. Selecting this item displays a dialog titled "MyScreen". It will ask you if you start capturing an image from the current screen.</p> <p>Please wait for the target image to be displayed, and press the ENTER button when the image is displayed. The image will freeze and the frame for capturing will appear.</p> <p>To stop performing, press the RESET or ESC button.</p> <p>2. Using the $\Delta/\nabla/\blacktriangle/\blacktriangleright$ buttons adjusts the frame position.</p> <p>Please move the frame to the position of the image which you want to use. The frame may not be able to be moved for some input signals.</p> <p>To start registration, press the ENTER button.</p> <p>To restore the screen and return to the previous dialog, press the RESET or ESC button.</p> <p>Registration takes several minutes.</p> <p>When the registration is completed, the registered screen and the following message are displayed for several seconds:</p> <p>"MyScreen registration is finished."</p> <p>If the registration failed, the following message is displayed:</p> <p>"A capturing error has occurred. Please try again."</p> <ul style="list-style-type: none"> • This function cannot be selected when the TURN ON is selected to the MyScreen Lock item (参照44)。 • This function cannot be selected when the TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION menu (参照44)。 
MyScreen Lock	<p>Using the Δ/∇ buttons turns on/off the MyScreen lock function.</p> <p>TURN ON \leftrightarrow TURN OFF</p> <p>When the TURN ON is selected, the MyScreen item is locked. Use this function for protecting the current MyScreen.</p> <ul style="list-style-type: none"> • This function cannot be selected when the TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION menu (参照44).

(continued on next page)

SCREEN Menu (continued)

Item	Description
MESSAGE	<p>Using the ▲/▼ buttons turns on/off the message function.</p> <p>TURN ON ⇔ TURN OFF</p> <p>When the TURN ON is selected, the following message function works.</p> <p>“AUTO IN PROGRESS” while automatically adjusting</p> <p>“NO INPUT IS DETECTED”</p> <p>“SYNC IS OUT OF RANGE”</p> <p>“Searching...” while searching for the input</p> <p>“Detecting...” while an input signal is detected</p> <p>The indication of the input signal displayed by changing</p> <p>The indication of the aspect ratio displayed by changing</p> <p>The indication of the PICTURE MODE displayed by changing</p> <p>The indication of the MY MEMORY displayed by changing</p> <p>The indication of “FREEZE” and “ll” while freezing the screen by pressing the FREEZE button.</p> <ul style="list-style-type: none"> When the TURN OFF is selected, please remember if the picture is freezing. Do not mistake freezing for a malfunction (§20).
SOURCE NAME	<p>Each input port for this projector can have a name applied to it.</p> <p>(1) Use the ▲/▼ buttons on the SCREEN menu to select SOURCE NAME and press the ► button.</p> <p>The SOURCE NAME menu will be displayed.</p> <p>(2) Use the ▲/▼ buttons on the SOURCE NAME menu to select the port to be named and press the ► button. Right side of the menu is blank until a name is specified.</p> <p>The SOURCE NAME dialog will be displayed.</p> <p>(3) The current name will be displayed on the first line. Use the ▲/▼/◀/► buttons and the ENTER or INPUT button to select and enter characters. The RESET button can be used to erase 1 character at a time. The name can be a maximum of 16 characters.</p> <p>(4) To change an already inserted character, press the ▲ button while the cursor is on the [A-N] row to move the cursor to the name displayed on the first line and use the ◀/► buttons to select character to be changed. Once a character in the name is selected use the ▼ button to move the cursor back down to the character entry area to select and enter characters as described above.</p> <p>(5) Select <input checked="" type="checkbox"/> and press the ENTER or INPUT buttons when finished entering text. To revert to the previous name without saving changes press the ESC or ◀ button and the INPUT button simultaneously.</p>    

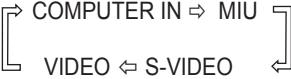
OPTION Menu

OPTION Menu

From the OPTION menu, items shown in the table below can be performed.

Select an item using the **▲/▼** cursor buttons, and press the **►** cursor button or ENTER button to execute the item, except for the items LAMP TIME and FILTER TIME. Then perform it according to the following table.

MENU [COMPUTER]		
PICTURE	AUTO SEARCH	TURN ON
IMAGE	AUTO KEYSTONE	TURN ON
INPUT	AUTO ON	TURN ON
SETUP	AUTO OFF	0 min
SCREEN	LAMP TIME	1234 h
OPTION	FILTER TIME	123 h
MIU	MY BUTTON	
EASY MENU	SERVICE	
	SECURITY	

Item	Description
AUTO SEARCH	<p>Using the ▲/▼ buttons turns on/off the automatic signal search function. TURN ON ⇔ TURN OFF</p> <p>When the TURN ON is selected, detecting no signal automatically cycles through input ports in the following order. The search is started from the current port. Then when an input is found, the projector will stop searching and display the image.</p> 
AUTO KEYSTONE <input checked="" type="checkbox"/>	<p>Using the ▲/▼ buttons turns on/off the automatic keystone function. TURN ON ⇔ TURN OFF</p> <p>TURN ON : Automatic keystone distortion correction will be executed whenever changing the slant of the projector.</p> <p>TURN OFF : This function is disabled. Please execute the AUTO KEYSTONE <input checked="" type="checkbox"/> EXECUTE in the SETUP Menu for automatic keystone distortion correction.</p> <ul style="list-style-type: none"> • When the projector is suspended from the ceiling this feature will not function properly so select the TURN OFF. • This function will be unavailable when the Transition Detector is on (47).
AUTO ON	<p>Using the ▲/▼ buttons turns on/off the AUTO ON function. TURN ON ⇔ TURN OFF</p> <p>When set to the TURN ON, the lamp in projector will be automatically turned on without the usual procedure (14), only when the projector is supplied with the power after the power was cut while the lamp was on.</p> <ul style="list-style-type: none"> • This function does not work as long as the power has been supplied to the projector while the lamp is off. • After turning the lamp on by the AUTO ON function, if neither input nor operation is detected for about 30 minutes, the projector is turned off, even though the AUTO OFF function (39) is disabled.

(continued on next page)

OPTION Menu (continued)

Item	Description
AUTO OFF	<p>Using the ▲/▼ buttons adjusts the time to count down to automatically turn the projector off.</p> <p>Long (max. 99 minutes) ⇄ Short (min. 0 minute = DISABLE)</p>  <p>When the time is set to 0, the projector is not turned off automatically. When the time is set to 1 to 99, and when the passed time with no-signal or an unsuitable signal reaches at the set time, the projector lamp will be turned off.</p> <p>If one of the projector's buttons or the remote control buttons is pressed or one of the commands (except get commands) is transmitted to the LAN port during the corresponding time, projector will not be turned off.</p> <p>Please refer to the section "Turning off the power" (図14).</p>
LAMP TIME	<p>The lamp time is the time counted after the last resetting. It is shown in the OPTION menu as the usage time of the lamp.</p> <p>Pressing the RESET button or the ▶ button displays a dialog.</p> <p>To reset the lamp time, select the RESET using the ▲ button.</p> <p>RESET ⇄ CANCEL</p> <ul style="list-style-type: none"> • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp. • For the lamp replacement, see the section "Lamp" (図55).
FILTER TIME	<p>The filter time is the time counted after the last resetting. It is shown in the OPTION menu as the usage time of the air filter.</p> <p>Pressing the RESET button or the ▶ button displays a dialog.</p> <p>To reset the filter time, select the RESET using the ▲ button.</p> <p>RESET ⇄ CANCEL</p> <ul style="list-style-type: none"> • Please reset the filter time only when you have cleaned or replaced the air filter, for a suitable indication about the air filter. • For the air filter cleaning, see the section "Air filter" (図57).

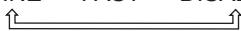
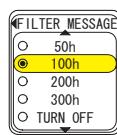
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OPTION Menu (continued)

Item	Description
MY BUTTON	<p>This item is to assign one of the following functions to MY BUTTON 1 and 2 on the remote control (図5). Choose 1 or 2 on the MY BUTTON menu using the $\blacktriangle/\blacktriangleright$ button first. Then using the $\blacktriangle/\blacktriangledown$ buttons sets one of the following functions to the chosen button.</p> <ul style="list-style-type: none"> COMPUTER: Sets port to COMPUTER IN. MIU: Sets port to MIU. S-VIDEO: Sets port to S-VIDEO. VIDEO: Sets port to VIDEO. e-SHOT: Displays the e-SHOT menu (図52). INFORMATION: Displays a dialog of INPUT/MIU INFORMATION (図42, 53). <p>If a signal is found, the dialog is switched as below.</p> <p style="text-align: center;">INPUT INFORMATION \Rightarrow MIU INFORMATION \Rightarrow OFF</p> <p style="text-align: center;">↑</p> <p>If no signal is found, the dialog is switched as below.</p> <p style="text-align: center;">MIU INFORMATION \Leftrightarrow OFF</p> <ul style="list-style-type: none"> AUTO KEYSTONE \square EXECUTE: Performs automatic keystone distortion correction (図32). MY MEMORY: Loads one of adjustment data stored (図26). <p>When the current adjustment is not saved to memory a dialog is displayed.</p> <p>When no data is saved in memory, a dialog is displayed.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Temporary condition</p> <p>MEMORY : Recall saved parameters</p> <p>◀ : Quit</p> </div> <div style="margin: 0 20px;"> <p>No saved data</p> </div> </div> <p>If you want to keep the current adjustment, please press the \blacktriangle button to quit. Otherwise the current adjusted condition will be lost by loading a data.</p> <ul style="list-style-type: none"> PICTURE MODE: Changes the PICTURE MODE (図22). FILTER RESET: Displays the filter time reset confirmation dialogue (図39). VOLUME+: Set the volume up. VOLUME-: Set the volume down.
SERVICE	<p>Selecting this item displays the SERVICE menu. Select an item using the $\blacktriangle/\blacktriangledown$ buttons, and press the \blacktriangleright button or the ENTER button to execute the item.</p> <p style="text-align: center;">FAN SPEED \Leftrightarrow AUTO ADJUST \Leftrightarrow GHOST \Leftrightarrow FILTER MESSAGE \Leftrightarrow KEY LOCK</p> <p style="text-align: center;">↑</p> <p style="text-align: center;">◀ FACTORY RESET \Leftrightarrow INFORMATION \Leftrightarrow REMOTE FREQ. ▶</p> <p>FAN SPEED</p> <p>Using the $\blacktriangle/\blacktriangledown$ buttons switches the rotation speed of the cooling fans. The HIGH is the mode for use at highlands etc. Note that the projector is noisier when the HIGH is selected.</p> <p style="text-align: center;">HIGH \Leftrightarrow NORMAL</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>FANSPEED</p> <p><input checked="" type="radio"/> HIGH</p> <p><input type="radio"/> NORMAL</p> </div>

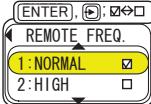
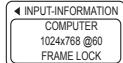
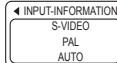
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OPTION Menu (continued)

Item	Description
	<p>AUTO ADJUST Using the ▲/▼ buttons enables/disables the automatic adjustment. When DISABLE is selected, the automatic adjustment feature is disabled, although rough adjustment is automatically performed depending on the basic setting.</p> <p>FINE ⇄ FAST ⇄ DISABLE</p>  <p>FINE: Finer tuning including H.SIZE adjustment. FAST: Faster tuning, setting H.SIZE to prearranged data for the input signal.</p> <ul style="list-style-type: none"> Depending on conditions, such as input image, signal cable to the projector, environment around the projector, etc., the automatic adjustment may not work correctly. In such a case, please choose DISABLE to disable the automatic adjustment, and make adjustment manually.
SERVICE (continued)	<p>GHOST</p> <ol style="list-style-type: none"> Select a color element of ghost using the ◀/▶ buttons. Adjust the selected element using the ▲/▼ buttons to disappear ghost. 
	<p>FILTER MESSAGE</p> <p>Use the ▲/▼ button to set the timer for the interval to show the message for cleaning up the air filter.</p> <p>50h ⇄ 100h ⇄ 200h ⇄ 300h ⇄ TURN OFF</p> <p>After selecting "50h", "100h", "200h", or "300h", the message "REMINDER *** HRS PASSED AFTER THE LAST FILTER CHECK" will appear after the timer reaches the interval time set by the menu (60). When the "TURN OFF" is chosen, the air filter cleaning message will not appear.</p> <ul style="list-style-type: none"> Please check and clean the air filter periodically, even if there is no message. If the air filter becomes to be blocked by dust or others, the internal temperature will rise, which could cause malfunction, or reduce the lifetime of the projector. It is recommended to choose "100h" in general. Please be careful with the operating environment of the projector and the condition of the air filter, especially when the "200h", "300h" or "TURN OFF" is chosen. 

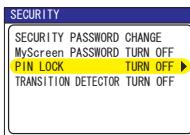
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OPTION Menu (continued)

Item	Description
SERVICE (continued)	<p>KEY LOCK Using the Δ/∇ buttons turns on/off the key lock feature. When TURN ON is selected, the buttons on the projector except the STANDBY/ON button are locked. TURN ON \Leftrightarrow TURN OFF</p> <ul style="list-style-type: none"> • Please use to avoid a mischief and touching accidentally. This function does not have any effect on the remote control. <p>REMOTE FREQ. Use the Δ/∇ button to change the Projector's remote sensor setting.</p> <p>1:NORMAL \Leftrightarrow 2:HIGH</p> <p>Items with a checkmark are on. The factory default setting is for both 1:NORMAL and 2:HIGH to be on. If the remote control does not function correctly set this to either only 1 or only 2 (§13). Neither can be turned off at the same time.</p>  <p>INFORMATION Selecting this item displays a dialog titled "INPUT INFORMATION". It shows the information about the current input.</p>    <ul style="list-style-type: none"> • The "FRAME LOCK" message on the dialog means the frame lock function is working. • This item can't be selected for no signal and sync out. <p>FACTORY RESET Selecting RESET using the button Δ performs this function. By this function, all the items in all of menus will collectively return to the initial setting. Note that the items LAMP TIME, FILTER TIME, LANGUAGE, MIU and SECURITY are not reset.</p> <p>RESET \Leftrightarrow CANCEL</p>

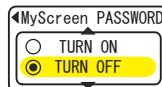
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OPTION Menu (continued)

Item	Description
SECURITY	<p>This projector is equipped with security functions. User registration is required before using the security functions. Please contact your local dealer.</p> <p>1. Using Security Features</p> <p>1.1 Inputting the PASSWORD</p> <p>1.1-1 Use the ▲/▼ buttons on the OPTION menu to select SECURITY and press the ▶ button. The ENTER PASSWORD box will be displayed.</p> <p>The factory default PASSWORD is 2805. This PASSWORD can be changed (1.2 Changing the PASSWORD).</p> <ul style="list-style-type: none"> • It is strongly recommended the factory default PASSWORD to be changed as soon as possible. <p>1.1-2 Use the ▲/▼/◀/▶ buttons to enter the registered PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX and press the ▶ button to display the SECURITY menu.</p> <p>If an incorrect PASSWORD is input the ENTER PASSWORD BOX will be displayed again. If incorrect PASSWORD is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PASSWORD is input.</p> <p>1.2 Changing the PASSWORD</p> <p>1.2-1 Use the ▲/▼ buttons on the SECURITY menu to select SECURITY PASSWORD CHANGE and press the ▶ button to display the ENTER NEW PASSWORD BOX.</p> <p>1.2-2 Use the ▲/▼/◀/▶ buttons to enter the new PASSWORD.</p> <p>1.2-3 Move the cursor to the right side of the ENTER NEW PASSWORD BOX and press the ▶ button to display the NEW PASSWORD AGAIN BOX, enter the same PASSWORD again.</p> <p>1.2-4 Move the cursor to the right side of the NEW PASSWORD AGAIN BOX and press the ▶ button and the NOTE NEW PASSWORD BOX will be displayed for about 20 seconds, please make note of the PASSWORD during this time.</p> <p>Pressing the ENTER button will close the NOTE NEW PASSWORD BOX.</p> <ul style="list-style-type: none"> • Please do not forget your PASSWORD.     

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OPTION Menu (continued)

Item	Description
SECURITY (continued)	<p>1.3 If you have forgotten your PASSWORD</p> <p>1.3-1 Follow the procedure in 1.1-1 to display the ENTER PASSWORD BOX.</p> <p>1.3-2 While the ENTER PASSWORD BOX is displayed, press and hold the RESET button for about 3 seconds or press and hold the INPUT and ▶ buttons on the projector for about 3 seconds</p> <p>The 10-digit Inquiring Code will be displayed.</p> <ul style="list-style-type: none"> • If there is no key input for about 55 seconds while the Inquiring Code is displayed the menu will close. If necessary repeat the process from 1.3-1. <p>1.3-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.</p> <p>2. Using the MyScreen PASSWORD Function</p> <p>The MyScreen PASSWORD function can be used to prohibit access to the MyScreen function and prevent the currently registered MyScreen image from being overwritten.</p> <p>2.1 Turning on the MyScreen PASSWORD Function</p> <p>2.1-1 Use the ▲/▼ buttons on the SECURITY menu to select MyScreen PASSWORD and press the ▶ button to display the MyScreen PASSWORD on/off menu.</p> <p>2.2 Setting the PASSWORD</p> <p>2.2-1 Display the MyScreen on/off menu using the procedure in 2.1-1.</p> <p>2.2-2 Use the ▲/▼ buttons on the MyScreen PASSWORD on/off menu to select TURN ON. The ENTER PASSWORD BOX (small) will be displayed.</p> <p>2.2-3 Use the ▲/▼/◀/▶ buttons to enter the PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX (small) and press the ▶ button to display the CHECK PASSWORD BOX, enter the same PASSWORD again.</p>   

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OPTION Menu (continued)

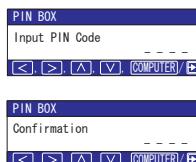
Item	Description
SECURITY (continued)	<p>2.2-4 Move the cursor to the right side of the CHECK PASSWORD BOX and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time.</p> <p>Pressing the ENTER button will return to MyScreen PASS WORD on/off menu.</p> <p>When a PASSWORD is set for MyScreen:</p> <ul style="list-style-type: none"> • The MyScreen registration function (and menu) will be unavailable. • The MyScreen Lock function (and menu) will be unavailable. • The START UP setting will be locked on MyScreen (and the menu will be unavailable). <p>Turning the MyScreen PASSWORD off will allow normal operation of both functions.</p> <ul style="list-style-type: none"> • Please do not forget your MyScreen PASSWORD. <p>2.3 Turning the PASSWORD off</p> <p>2.3-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu.</p> <p>2.3-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). Enter the registered PASSWORD and the screen will return to the MyScreen on/off menu.</p> <p>If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 2.3-1.</p> <p>2.4 If you have forgotten your PASSWORD</p> <p>2.4-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu.</p> <p>2.4-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). The 10-digit Inquiring Code will be displayed inside the BOX.</p> <p>2.4-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.</p> <p>3. Using the PIN LOCK Function</p> <p>PIN LOCK is a function which prevents the projector from being used unless a registered Code is input.</p> <p>3.1 Registering the PIN Code</p> <p>3.1-1 Use the ▲/▼ buttons on the SECURITY menu to select PIN LOCK and press the ► button or the ENTER button to display the PIN LOCK on/off menu.</p>   

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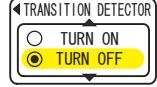
OPTION Menu (continued)

Item	Description
SECURITY (continued)	<p>3.1-2 Use the ▲/▼ buttons on the PIN LOCK on/off menu to select TURN ON and the PIN BOX will be displayed.</p> <p>3.1-3 Input a 4 part PIN Code using the ▲, ▼, ◀, ▶, COMPUTER/STORAGE and INPUT buttons.</p> <p>A CONFIRMATION BOX will appear. Reenter the same PIN Code. This will complete the PIN Code registration.</p> <ul style="list-style-type: none"> • If there is no key input for about 55 seconds while the PIN BOX or the CONFIRMATION BOX are displayed the menu will close. If necessary repeat the process from 3.1-1. <p>Afterwards, anytime the projector is restarted after AC power is turned off the PIN BOX will be displayed. Enter the registered PIN Code.</p> <p>The projector can be used after entering the registered PIN Code. If an incorrect PIN Code is input the PIN BOX will be displayed again.</p> <p>If an incorrect PIN Code is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PIN Code is input. The projector will also turn off if there is no key input for about 5 minutes while the PIN BOX is displayed.</p> <p>This function will activate only when the projector is started after AC power is turned off.</p> <ul style="list-style-type: none"> • Please do not forget your PIN Code. <p>3.2 Turning Off the PIN LOCK Function</p> <p>3.2-1 Follow the procedure in 3.1-1 to display the PIN LOCK on/off menu. Use the ▲/▼ buttons to select TURN OFF and the PIN BOX will be displayed.</p> <p>Enter the registered PIN Code to turn the PIN LOCK function off. If an incorrect PASSWORD is entered the menu will close.</p> <p>3.3 If you have forgotten your PIN Code</p> <p>3.3-1 While the PIN BOX is displayed, press and hold the RESET button for 3 seconds or press and hold the INPUT and ▶ buttons for 3 seconds. The 10-digit Inquiring Code will be displayed.</p> <ul style="list-style-type: none"> • If it passes for about 5 minutes after the PIN BOX is displayed the projector will turn off. <p>3.3-2 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.</p>

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OPTION Menu (continued)

Item	Description
	<p>4. Using the Transition Detector Function</p> <p>While the Transition Detector function is ON, when power switch is started to supply to the projector, it might react as below.</p> <ul style="list-style-type: none"> • Transition Detector alarm shown below might appear on screen, if the projector has been moved or re-installed. • Transition Detector alarm might appear on screen, if the MIRROR setting has been changed. • Keystone adjustment feature has been prohibited as long as the Transition Detector function is ON. <p>4.1 Turning On the Transition Detector Function</p> <p>4.1-1 Use the ▲/▼ buttons on the SECURITY menu to select TRANSITION DETECTOR and press the ► or the ENTER button to display the TRANSITION DETECTOR on/off menu.</p> <p>Select TURN ON and the current angle and mirror setting will be recorded.</p> <ul style="list-style-type: none"> • This feature may not function properly if the projector is not in a stable position when TURN ON is selected. <p>4.1-2 If this function is set to TURN ON when the vertical angle of the projector or mirror setting at which the projector is turned on is different than the previously recorded the Transition Detector Alarm will be displayed and the projector will not display the input signal.</p> <p>Set the Transition Detector off in the SECURITY menu to display the input signal. If the Transition Detector ALARM is displayed for about 5 minutes the lamp will turn off. This function will activate only when the projector is started after turning off the AC power.</p> <p>4.2 Setting the Transition Detector PASSWORD</p> <p>4.2-1 Use the ▲/▼ buttons on the SECURITY menu to select TRANSITION DETECTOR and press the ► or the ENTER button to display the TRANSITION DETECTOR on/off menu.</p> <p>4.2-2 Use the ▲/▼ buttons on the TRANSITION DETECTOR on/off menu to select TURN ON. The ENTER PASSWORD BOX (small) will be displayed.</p> <p>4.2-3 Use the ▲/▼/◀/► buttons to enter a PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX (small) and press the ► button to display the CHECK PASSWORD BOX, enter the same PASSWORD again.</p> <p>4.2-4 Move the cursor to the right side of the CHECK PASSWORD BOX and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time.</p> <p>Pressing the ENTER button will return to the TRANSITION DETECTOR on/off menu.</p> <ul style="list-style-type: none"> • Please do not forget your Transition Detector PASSWORD.
SECURITY (continued)	 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>◀TRANSITION DETECTOR</p> <p><input type="radio"/> TURN ON</p> <p><input checked="" type="radio"/> TURN OFF</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>◀TRANSITION DETECTOR ON></p> <p>The projector has been transferred from previously installed position.</p> <p>If you wish to have a square image on screen again, disable Transition Detector on Menu.</p> </div>

(continued on next page)

OPTION Menu (continued)

Item	Description
SECURITY (continued)	<p>4.3 Setting the Transition Detector off</p> <p>4.3-1 Follow the procedure in 4.1-1 to display the TRANSITION DETECTOR on/off menu.</p> <p>4.3-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). Enter the registered PASSWORD and the screen will return to the TRANSITION DETECTOR on/off menu. If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 4.3-1.</p> <p>4.4 If you have forgotten your PASSWORD</p> <p>4.4-1 Follow the procedure in 4.1-1 to display the TRANSITION DETECTOR on/off menu.</p> <p>4.4-2 Select TURN OFF to display the ENTER PASSWORD BOX (large). The 10-digit Inquiring Code will be displayed inside the BOX.</p> <p>4.4-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.</p>



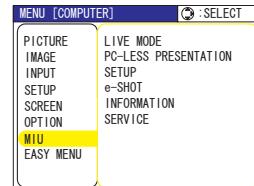
MIU Menu

Remember that incorrect network settings on this projector may cause trouble on the network. Be sure to consult with your network administrator before connecting to an existing access point on your network.

Select “MIU” from the main menu to access the following functions.

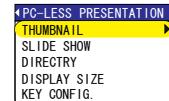
Select an item using the ▲/▼ cursor buttons on the projector or remote control, and press the ► cursor button on the projector or remote control, or ENTER button on the remote control to execute the item. Then perform it according to the following table.

See the User’s Manual - Network Functions for details of MIU operation.



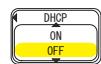
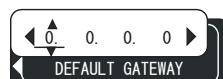
NOTE • The factory default setting for DHCP is OFF. If your network has DHCP enabled, and needs to set IP ADDRESS, SUBNET MASK and DEFAULT GATEWAY automatically, please set DHCP to ON. ([2.5.2 Network Settings of the User’s Manual - Network Functions](#))
 • If you are not utilizing SNTP ([2.5.7 Date/Time Settings of the User’s Manual - Network Functions](#)), then you must set the DATE AND TIME ([51](#)) during the initial installation.

Item	Description
LIVE MODE	Selecting this item sets the projector onto the “Live Mode”. On the “Live Mode”, the projector displays the images from the PC via Network, supported by “MIU Live Viewer”. (1.1 Live Mode of the User’s Manual - Network Functions) In the Live Mode, the message “Waiting for connection” will be displayed until the “MIU Live Viewer” start to send computer screen image.
PC-LESS PRESENTATION	Selecting this item displays the PC-LESS PRESENTATION menu. Using the menu is able to make the projector display the images stored in SD Memory Card or USB memory, and realizes a presentation without PC. (1.2 PC-LESS Presentation of the User’s Manual - Network Functions)



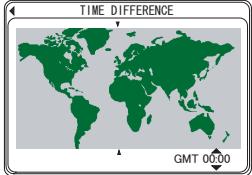
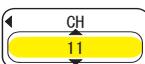
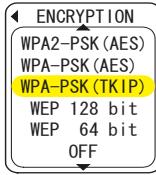
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MIU Menu (continued)

Item	Description	
SETUP	Selecting this item displays the MIU SETUP menu. Use the ▲/▼ buttons to select an item, and the ► or ENTER button on the remote control to perform the item.	
	DHCP (Dynamic Host Configuration Protocol)	Use the ▲/▼ buttons to turn DHCP on/off. ON ⇔ OFF Select OFF when the network does not have DHCP enabled.  <ul style="list-style-type: none"> When the "DHCP" setting changes to "ON", it takes a little time to obtain IP address from DHCP server. Auto IP function will be assigned an IP address if the projector could not obtain an IP address from server even if DHCP is "ON".
	IP ADDRESS	Use the ▲/▼/◀/▶ buttons to enter the IP ADDRESS. This function can only be used when DHCP is set to OFF.  <ul style="list-style-type: none"> The IP ADDRESS is the number that identifies this projector on the network. You cannot have two devices with the same IP ADDRESS on the same network. The IP ADDRESS "0.0.0.0" is prohibited.
	SUBNET MASK	Use the ▲/▼/◀/▶ buttons to enter the same SUBNET MASK used by your PC. This function can only be used when DHCP is set to OFF.  <ul style="list-style-type: none"> The SUBNET MASK "0.0.0.0" is prohibited.
	DEFAULT GATEWAY	Use the ▲/▼/◀/▶ buttons to enter the DEFAULT GATEWAY (a node on a computer network that serves as an access point to another network) address. This function can only be used when DHCP is set to OFF. 

(continued on next page)

MIU Menu (continued)

Item	Description	
SETUP (continued)	TIME DIFFERENCE	<p>Use the ▲/▼ buttons to enter the TIME DIFFERENCE. Set the same TIME DIFFERENCE as the one set on your PC. If unsure, consult your IT manager. Use the ◀ button to return to the menu after setting the TIME DIFFERENCE.</p> 
	DATE AND TIME	<p>Use the ▲/▼/◀/▶ buttons to enter the Year (last two digits), Month, Date, Hour and Minute.</p> <ul style="list-style-type: none"> The projector will override this setting and retrieve DATE AND TIME information from the Time server when SNTP is enabled. (2.5.7 Date/Time Settings of the User's Manual - Network Functions) 
	MODE	<p>Use the ▲/▼ buttons to select the mode of the network communication system. Select it according to the setting of your PC.</p> <p>ADHOC ⇔ INFRASTRUCTURE</p> 
	CH	<p>Use the ▲/▼ buttons to select the channel of the wireless LAN while using it. Select it according to the setting of your PC.</p> <p>The channels 1 to 11 are available.</p> <ul style="list-style-type: none"> The available channels would be various depending on a country. In addition, wireless network card might be required due to the standard. 
	ENCRYPTION	<p>Use the ▲/▼ buttons to select the encryption method to be used.</p>  <p>WPA2-PSK(AES) ⇔ WPA-PSK(AES) ⇔ WPA-PSK(TKIP) ⇔ WEP 128bit ⇔ WEP 64bit ⇔ OFF</p>

(continued on next page)

MIU Menu (continued)

Item	Description	
SETUP (continued)	SPEED	<p>Use the Δ/∇ buttons to select the transfer rate. (M : Mbps : Megabits per second)</p> <p>AUTO \leftrightarrow 54M \leftrightarrow 48M \leftrightarrow 36M \leftrightarrow 24M \leftrightarrow 18M \uparrow \downarrow \uparrow \downarrow 1M \leftrightarrow 2M \leftrightarrow 5.5M \leftrightarrow 6M \leftrightarrow 9M \leftrightarrow 11M \leftrightarrow 12M</p> <ul style="list-style-type: none"> • The AUTO mode automatically selects the optimum rate. • Transfer rates may change due to the network situation.
	NETWORK MODE	<p>Use the Δ/∇ buttons to select the network mode.</p> <p>WIRELESS \leftrightarrow WIRED</p> <ul style="list-style-type: none"> • The network mode will be initialized whenever the power is turned on with the power switch. • The WIRELESS will be enabled when the wireless network card is inserted. • The WIRED will be enabled when the wireless network card is not inserted.
e-SHOT	<p>Selecting this item displays the e-SHOT menu. Insert the SD Memory Card or USB memory into the projector before you use the e-SHOT function. (10) The application software "PJTransfer" is required to store image(s) into the projector.</p> <p>Use the Δ/∇ buttons to select an item which is a still image by the e-SHOT (4.7 e-SHOT (Still Image Transfer) Display of the User's Manual - Network Functions) and the \blacktriangleright or ENTER button to display the image.</p> <ul style="list-style-type: none"> • The item without image stored cannot be selected. • The image names are each displayed in 16 characters or less. <p>To switch the image displayed</p> <p>Use the Δ/∇ buttons.</p> <p>To return to the menu</p> <p>Press the \blacktriangleleft or ESC button on the remote control.</p> <p>To erase the image displayed and its source file in the SD Memory Card or USB memory</p> <ol style="list-style-type: none"> (1) Press the RESET button on the remote control while displaying an image to display the e-SHOT - RESET menu. (2) Press the ENTER button on the remote control or the INPUT button on the projector to perform to erase. To stop erasing, press the ESC button on the remote control or the \blacktriangleleft button on the projector. 	

(continued on next page)

MIU Menu (continued)

Item	Description																																				
INFORMATION	<p>Selecting this item displays the MIU-INFORMATION dialog for confirming the network settings.</p> <div style="border: 1px solid black; padding: 10px; border-radius: 10px;"> <p style="text-align: center; margin-bottom: 5px;">◀ MIU-INFORMATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 30%;">NAME</td> <td>projector</td> <td style="width: 30%;">NETWORK MODE</td> <td>WIRELESS</td> </tr> <tr> <td>IP ADDRESS</td> <td>192.168.1.10</td> <td>OPERATION</td> <td>LIVE</td> </tr> <tr> <td>SUBNETMASK</td> <td>255.255.255.0</td> <td>USB</td> <td>MEMORY</td> </tr> <tr> <td>DEFAULT GATEWAY</td> <td>0.0.0.0</td> <td>SD CARD</td> <td>WIRELESS</td> </tr> <tr> <td>TIME DIFFERENCE</td> <td>GMT +00:00</td> <td>SPEED</td> <td>12 M</td> </tr> <tr> <td>DATE AND TIME</td> <td>2000/1/1 0:00</td> <td>SSID</td> <td>wireless</td> </tr> <tr> <td>MODE</td> <td>ADHOC</td> <td>MAC ETHERNET</td> <td>00-00-87-56-AC-DA</td> </tr> <tr> <td>CH</td> <td>11</td> <td>MAC WIRELESS</td> <td>00-00-10-02-00-62</td> </tr> <tr> <td>ENCRYPTION</td> <td>WEP 128 bit</td> <td></td> <td></td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> • Only the first 16 characters of the projector name are displayed. • Nothing (blank) is shown in the “NAME” and “SSID” field until you setup those items. For setup, please refer to 2.5.2 Network Settings of User’s Manual - Network Functions. • When the voltage level of the battery for the built in clock decreases, the set time may become incorrect even though accurate date and time are input. Replace the battery suitably. (■58) • MAC wireless will not be displayed when the NETWORK MODE is set to the WIRED even if the wireless network card is mounted. • IP ADDRESS, SUBNET MASK and DEFAULT GATEWAY indicate “0.0.0.0” in the following condition. <ul style="list-style-type: none"> (1) The NETWORK MODE is set to the WIRELESS and the wireless network card is not mounted. (2) DHCP is ON and the projector does not get address from DHCP server. • Nothing (blank) is shown in the “CH”, “SPEED” and “MAC WIRELESS” field in case of either no wireless network card is inserted or “WIRED” mode is selected at NETWORK MODE, or both. • The actual performance and setting will be shown in the “CH” and “SPEED” field, instead of the setting value in the MIU SETUP menu. 	NAME	projector	NETWORK MODE	WIRELESS	IP ADDRESS	192.168.1.10	OPERATION	LIVE	SUBNETMASK	255.255.255.0	USB	MEMORY	DEFAULT GATEWAY	0.0.0.0	SD CARD	WIRELESS	TIME DIFFERENCE	GMT +00:00	SPEED	12 M	DATE AND TIME	2000/1/1 0:00	SSID	wireless	MODE	ADHOC	MAC ETHERNET	00-00-87-56-AC-DA	CH	11	MAC WIRELESS	00-00-10-02-00-62	ENCRYPTION	WEP 128 bit		
NAME	projector	NETWORK MODE	WIRELESS																																		
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MODE	ADHOC	MAC ETHERNET	00-00-87-56-AC-DA																																		
CH	11	MAC WIRELESS	00-00-10-02-00-62																																		
ENCRYPTION	WEP 128 bit																																				

MIU Menu (continued)

Item	Description
SERVICE	<p>Selecting this item displays the SERVICE menu. Use the ▲/▼ buttons to select an item, and the ▶ or ENTER button on the remote control to perform the item.</p> <p>REMOVE ALL, REMOVE SD CARD, REMOVE USB Choose one of the following items either "REMOVE ALL", "REMOVE SD CARD" or "REMOVE USB" that matches a media to be taken out, from projector, when you remove the SD Memory Card or USB memory.</p>  <p>Use the ▲ button to perform the procedure to remove the media. EXECUTE ⇫ CANCEL The "SUCCEED" message will be displayed when the media is ready to remove. If "FAILED" message is displayed, please retry remove process again a few minutes later.</p> <ul style="list-style-type: none"> When removing wireless network card, turn the projector off and unplug the power cord. AS long as the media is ready to remove or no media is inserted, the "SUCCEED" message will be displayed whenever the removal procedure is performed. <p>MIU RESTART Use the ▲ button to restart the network communication. The network communication will be cut off once and restarted.</p>  <p>EXECUTE ⇫ CANCEL After selecting the EXECUTE, the MIU menu may not be controlled approximately 20 seconds. If DHCP is ON, IP address may be changed.</p>

Maintenance

Lamp

A lamp has finite product life. Using the lamp for long periods of time could cause the pictures darker or the color tone poor. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. Preparation of a new lamp and early replacement are recommended. To prepare a new lamp, contact your dealer and tell the lamp type number.

Type number : <CPX2> DT00781 / <CPX6> DT00821

Replacing the lamp

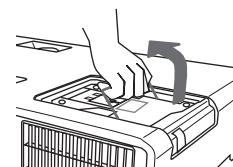
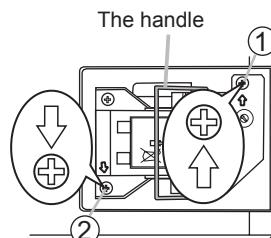
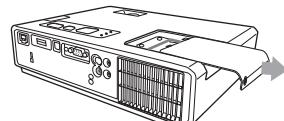
1. Turn the projector off, and unplug the power cord.
Allow the projector to cool for at least 45 minutes.
2. Prepare a new lamp.
If the projector is mounted on a ceiling, or if the lamp has broken, also ask the dealer to replace the lamp.

In case of replacement by yourself,

3. Loosen the screw (marked by arrow) of the lamp cover and then slide the lamp cover to the side to remove it.
4. Loosen the 2 screws (marked by arrow) of the lamp, and slowly pick up the lamp by the handle.
It may make it easy to take the lamp out slightly toward the control panel of the projector.
5. Insert the new lamp, and retighten firmly the 2 screws of the lamp that are loosened in the previous process to lock it in place. Tighten the screw ① first, then screw ②.
6. Slide the lamp cover back in place and firmly fasten the screw of the lamp cover.
7. Turn the projector on and reset the lamp time using the LAMP TIME item in the OPTION menu.
 - (1) Press the MENU button to display a menu.
 - (2) Point at the "Go to Advanced Menu ..." in the menu using the ▼/▲ button, then press the ▶ button.
 - (3) Point at the "OPTION" in the left column of the menu using the ▼/▲ button, then press the ▶ button.
 - (4) Point at the "LAMP TIME" using the ▼/▲ button, then press the ▶ button. A dialog will appear.
 - (5) Press the ▲ button to select "RESET" on the dialog. It performs resetting the lamp time.

⚠ CAUTION ▶ Do not touch any inner space of the projector, while the lamp is taken out.

NOTE • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp.



Lamp (continued)**Lamp warning**

 **HIGH VOLTAGE**  **HIGH TEMPERATURE**  **HIGH PRESSURE**

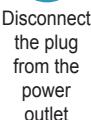
⚠WARNING ► The projector uses a high-pressure mercury glass lamp. The lamp can break with a loud bang, or burn out, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.

► **About disposal of a lamp:** This product contains a mercury lamp; do not put it in a trash. Dispose of it in accordance with environmental laws.

- For lamp recycling, go to www.lamprecycle.org. (in the US).
- For product disposal, contact your local government agency or www.eiae.org (in the US) or www.epsc.ca (in Canada).

For more information, call your dealer.

- If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.
- If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- Before replacing the lamp, turn the projector off and unplug the power cord, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.



Disconnect the plug from the power outlet

- Never unscrew except the appointed (marked by an arrow) screws.
- Do not open the lamp cover while the projector is suspended from above. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
- Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.



- Use only the lamp of the specified type.
- If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- Using the lamp for long periods of time could cause it dark, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, please replace the lamp as soon as possible. Do not use old (used) lamps; this is a cause of breakage.

Air filter

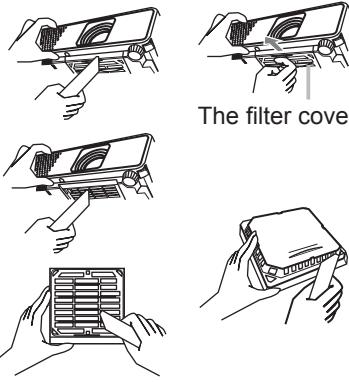
Please check and clean the air filter periodically. When the indicators or a message prompts you to clean the air filter, comply with it as soon as possible. Replace the air filter when it is damaged or too soiled. To prepare a new air filter, contact your dealer and tell the air filter type number.

Type number : MU03602

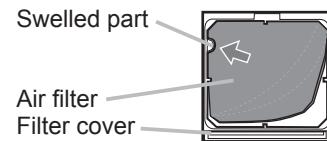
When you replace the lamp, please replace the air filter. An air filter of specified type will come together with a replacement lamp for this projector.

Cleaning the air filter

1. Turn the projector off, and unplug the power cord. Allow the projector to sufficiently cool down.
2. Use a vacuum cleaner on and around the filter cover.
3. While supporting the projector with one hand, use your other hand to pull the filter cover forward in the direction of the arrow.
4. Use a vacuum cleaner for the filter ventilation of the projector. And clean the air filter that is set at one side of the filter cover by using a vacuum cleaner over the other side of the filter cover.
Please replace the air filter when it is damaged or too soiled. When the air filter is set, take its half moon shape cut part to the swelled part of the filter cover.
5. Put the filter unit back into the projector.
6. Turn the projector on and reset the filter time using the FILTER TIME item in the EASY MENU.
 - (1) Press the MENU button to display a menu.
 - (2) Point at the "FILTER TIME" using the ▼/▲ button, then press the ► button. A dialog will appear.
 - (3) Press the ▲ button to select "RESET" on the dialog. It performs resetting the filter time.



The air filter is set in the reverse side



WARNING ► Before taking care of the air filter, make sure the power cable is not plugged in, then allow the projector to cool sufficiently.

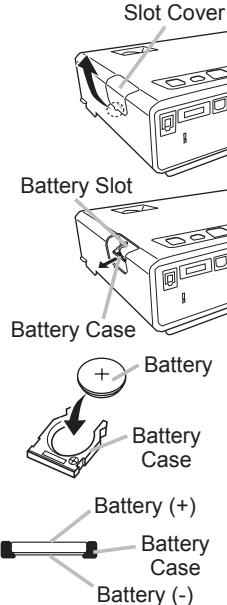
► Use only the air filter of the specified type. Do not use the projector without the air filter or the filter cover. It could result in a fire or malfunction to the projector.
► Clean the air filter periodically. If the air filter becomes clogged by dust or the like, internal temperatures rise and could cause a fire, a burn or malfunction to the projector.

NOTE • Please reset the filter time only when you have cleaned or replaced the air filter, for a suitable indication about the air filter.
• The projector may display the message such as "CHECK THE AIR FLOW" or turn off the projector, to prevent the internal heat level rising.

Internal clock battery

Consumption of the battery makes the clock not to work correctly. When the clock is wrong or it has stopped, please replace the battery according to the following procedures.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
2. After making sure that the projector has cooled adequately, pull the slot cover forward, pushing slightly its edge up, and remove it from the projector.
3. Remove the battery case.
Hold the battery case gutter by finger nail or other thing and pull out the battery case slowly from the battery slot.
4. Take the old battery out from the battery case.
5. Replace a new battery.
Replace battery with **HITACHI MAXELL, Part No.CR2032** only. Use of another battery may present a risk of fire or explosion.
Put a new battery into battery case. Please make sure that the + is facing upward. Insert the battery case slowly into the battery slot until you hear the snap.
6. Close the slot cover.
Replace the slot cover by reversing the procedure used when removing the cover.



⚠WARNING ▶ Always handle the batteries with care and use them only as directed. Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

And also improper use may result in cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

- Be sure to use only the batteries specified. Do not use batteries of different types at the same time. Do not mix a new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading a battery.
- Keep a battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.
- Do not short circuit or solder a battery.
- Do not allow a battery in a fire or water. Keep batteries in a dark, cool and dry place.
- If you observe a leakage of a battery, wipe out the flower and then replace a battery. If the liquid adheres to your body or clothes, rinse well with water immediately.
- Obey the local laws on disposing the battery.

NOTE • The internal clock's time will be reset when the battery is removed.

Please reconfigure the time via the menu or a web browser after replacing the battery.

(**2.5.7 Date/Time Settings of the User's Manual - Network Functions**)

Other care

Inside of the projector

In order to ensure the safe use of your projector, please have it cleaned and inspected by your dealer about once every year.

Caring for the lens

If the lens is flawed, soiled or fogged, it could cause deterioration of display quality. Please take care of the lens, being cautious of handling.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
2. After making sure that the projector is cool adequately, lightly wipe the lens with a commercially available lens-cleaning wipe. Do not touch the lens directly with your hand.

Caring for the cabinet and remote control

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
2. After making sure that the projector is cool adequately, lightly wipe with gauze or a soft cloth.

If the projector is extremely dirty, dip soft cloth in water or a neutral cleaner diluted in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

⚠WARNING ► Before caring, make sure the power cable is not plugged in, and then allow the projector to cool sufficiently. The care in a high temperature state of the projector could cause a burn and/or malfunction to the projector.

► Never try to care for the inside of the projector personally. Doing is so dangerous.

► Avoid wetting the projector or inserting liquids in the projector. It could result in a fire, an electric shock, and/or malfunction to the projector.

- Do not put anything containing water, cleaners or chemicals near the projector.

- Do not use aerosols or sprays.

⚠CAUTION ► Please take right care of the projector according to the following. Incorrect care could cause not only an injury but adverse influence such as discoloration, peeling paint, etc.

► Do not use cleaners or chemicals other than those specified in this manual.

► Do not polish or wipe with hard objects.

Troubleshooting

If an abnormal operation should occur, stop using the projector immediately.

⚠WARNING ► Never use the projector if abnormal operations such as smoke, strange odor, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. should occur. In such cases, immediately disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer or service company.

Otherwise if a problem occurs with the projector, the following checks and measures are recommended before requesting repair.

If this does not resolve the problem, please contact your dealer or service company. They will tell you what warranty condition is applied.

Related messages

When some message appears, check and cope with it according to the following table. Although these messages will be automatically disappeared around several minutes, it will be reappeared every time the power is turned on.

Message	Description
NO INPUT IS DETECTED ***	There is no input signal. Please confirm the signal input connection, and the status of the signal source.
SYNC IS OUT OF RANGE *** fH ***kHz fV ***Hz	The horizontal or vertical frequency of the input signal is not within the specified range. Please confirm the specs for your projector or the signal source specs.
CHECK THE AIR FLOW	The internal temperature is rising. Please turn the power off, and allow the projector to cool down at least 20 minutes. After having confirmed the following items, please turn the power ON again. <ul style="list-style-type: none"> • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please set FAN SPEED of the SERVICE item in the OPTION menu to HIGH.
REMINDER *** HRS PASSED AFTER THE LAST FILTER CHECK. FILTER MAINTENANCE IS ESSENTIAL TO REMOVE WARNING MESSAGE, RESET FILTER TIMER. SEE MANUAL FURTHER INFO.	A note of precaution when cleaning the air filter. Please immediately turn the power off, and clean or change the air filter referring to the "Air Filter" section of this manual. After you have cleaned or changed the air filter, please be sure to reset the filter timer (57).

Regarding the indicator lamps

When operation of the LAMP, TEMP and POWER indicators differs from usual, check and cope with it according to the following table.

POWER indicator	LAMP indicator	TEMP indicator	Description
Lighting In Orange	Turned off	Turned off	The projector is in a standby state. Please refer to the section "Power on/off".
Blinking In Green	Turned off	Turned off	The projector is warming up. Please wait.
Lighting In Green	Turned off	Turned off	The projector is in an on state. Ordinary operations may be performed.
Blinking In Orange	Turned off	Turned off	The projector is cooling down. Please wait.
Blinking In Red	(discretionary)	(discretionary)	The projector is cooling down. A certain error has been detected. Please wait until the POWER indicator finishes blinking, and then perform the proper measure using the item descriptions below.
Blinking In Red or Lighting In Red	Lighting In Red	Turned off	The lamp does not light, and there is a possibility that interior portion has become heated. Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again. <ul style="list-style-type: none">• Is there blockage of the air passage aperture?• Is the air filter dirty?• Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please change the lamp referring to the section "Lamp".
Blinking In Red or Lighting In Red	Blinking In Red	Turned off	The lamp cover has not been properly fixed. Please turn the power off, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp cover. After performing any needed maintenance, turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.
Blinking In Red or Lighting In Red	Turned off	Blinking In Red	The cooling fan is not operating. Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation that no foreign matter has become caught in the fan, etc., and then turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.

(continued on next page)

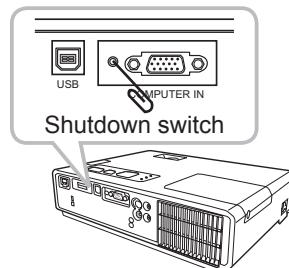
Regarding the indicator lamps (continued)

POWER indicator	LAMP indicator	TEMP indicator	Description
Blinking In Red or Lighting In Red	Turned off	Lighting In Red	<p>There is a possibility that the interior portion has become heated.</p> <p>Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again.</p> <ul style="list-style-type: none"> • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C? <p>If the same indication is displayed after the remedy, please set FAN SPEED of the SERVICE item in the OPTION menu to HIGH.</p>
Lighting In Green	Simultaneous blinking in Red		<p>It is time to clean the air filter.</p> <p>Please immediately turn the power off, and clean or change the air filter referring to the section "Air Filter". After cleaning or changing the air filter, please be sure to reset the filter timer. After the remedy, reset the power to ON.</p>
Lighting In Green	Alternative blinking in Red		<p>There is a possibility that the interior portion has become overcooled.</p> <p>Please use the unit within the usage temperature parameters (5°C to 35°C). After the treatment, reset the power to ON.</p>
Blinking in Green for approx. 3 seconds	Turned off	Turned off	<p>At least 1 "Power ON" schedule is saved to the projector.</p> <p>(Please refer to the User's Manual-Network Functions: Schedule Settings for more information.)</p>

NOTE • When the interior portion has become overheated, for safety purposes, the projector is automatically shut down, and the indicator lamps may also be turned off. In such a case, disconnect the power cord, and wait at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.

Shutting the projector down

Only when the projector can not be turned off by usual procedure (図14), please push the shutdown switch using a pin or similar, and disconnect the power plug from the power outlet. Before turning it on again, wait at least 10 minutes to make the projector cool down enough.



Resetting all settings

When it is hard to correct some wrong settings, the FACTORY RESET function of the SERVICE item in the OPTION menu (図42) can reset all settings(except LANGUAGE, FILTER TIME, LAMP TIME, FILTER MESSAGE, MIU and etc.) to the factory default.

Phenomena that may be easy to be mistaken for machine defects

About the phenomenon confused with a machine defect, check and cope with it according to the following table.

Phenomenon	Cases not involving a machine defect	Reference page
Power does not come on.	The electrical power cord is not plugged in. Correctly connect the power cord.	11
	The main power source has been interrupted during operation such as by a power outage (blackout), etc. Please disconnect the power plug from the power outlet, and allow the projector to cool down at least 10 minutes, then turn the power on again.	11, 14
	Either there is no lamp and/or lamp cover, or either of these has not been properly fixed. Please turn the power off and disconnect the power plug from the power outlet, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.	55
Neither sounds nor pictures are outputted.	The signal cables are not correctly connected. Correctly connect the connection cables.	8
	Signal source does not correctly work. Correctly set up the signal source device by referring to the manual of the source device.	—
	The input changeover settings are mismatched. Select the input signal, and correct the settings.	15, 16
Sound does not come out.	The signal cables are not correctly connected. Correctly connect the audio cables.	8
	The MUTE function is working. Restore the sound pressing the MUTE or VOLUME button on the remote control.	15
	The volume is adjusted to an extremely low level. Adjust the volume to a higher level using the menu function or the remote control.	15
No pictures are displayed.	The AUDIO setting is not correct. Correctly set the AUDIO in the SETUP menu.	33
	The lens cover is attached. Remove the lens cover.	14
	The signal cables are not correctly connected. Correctly connect the connection cables.	8

(continued on next page)

Troubleshooting

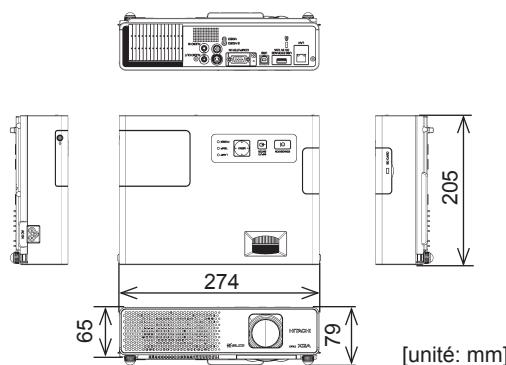
Phenomena that may be easy to be mistaken for machine defects (continued)

Phenomenon	Cases not involving a machine defect	Reference page
No pictures are displayed. (continued)	The brightness is adjusted to an extremely low level. Adjust BRIGHTNESS to a higher level using the menu function or the remote control.	23, 24
	The computer cannot detect the projector as a plug and play monitor. Make sure that the computer can detect a plug and play monitor using another plug and play monitor.	9
	The BLANK screen is displayed. Press the BLANK button on the remote control.	20
Video screen display freezes.	The FREEZE function is working. Press the FREEZE button to restore the screen to normal.	20
Colors have a faded-out appearance, or Color tone is poor.	Color settings are not correctly adjusted. Perform picture adjustments by changing the COLOR TEMP, COLOR, TINT and/or COLOR SPACE settings, using the menu functions.	23, 25, 29
	COLOR SPACE setting is not suitable. Change the COLOR SPACE setting to AUTO, RGB, SMPTE240, REC709 or REC601.	29
Pictures appear dark.	The brightness and/or contrast are adjusted to an extremely low level. Adjust BRIGHTNESS and/or CONTRAST settings to a higher level using the menu function.	23, 24
	The WHISPER function is working. Select NORMAL for the WHISPER item in the SETUP menu.	23, 33
	The lamp is approaching the end of its product lifetime. Replace the lamp.	55
Pictures appear blurry.	Either the focus and/or horizontal phase settings are not properly adjusted. Adjust the focus using the focus ring, and/or H PHASE using the menu function.	17, 28
	The lens is dirty or misty. Clean the lens referring to the section "Caring for the lens".	59

NOTE • Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and it does not constitute or imply a machine defect.

Specifications

Item	Specification	
Product name	Liquid crystal projector	
Liquid Crystal Panel	Panel size Drive system Pixels	1.6 cm (0.63 type) TFT active matrix 786,432 pixels (1024 horizontal x 768 vertical)
Lens	Zoom lens F=1.8 ~ 1.9 f = 16.4~ 19.7 mm	
Lamp	<CPX2> 160W UHB <CPX6> 190W UHP	
Speaker	1 W x1	
Power supply	<CPX2> AC100-120V/2.8A, AC220-240V/1.4A <CPX6> AC100-120V/3.4A, AC220-240V/1.7A	
Power consumption	<CPX2> 250 W <CPX6> 310 W	
Temperature range	5 ~ 35°C (Operating)	
Size	274 (W) x 65 (H) x 205 (D) mm * Not including protruding parts. Please refer to the following figure.	
Weight (mass)	1.8 kg	
Ports	Computer input port COMPUTER IND-sub 15 pin mini x1 Video input port S-VIDEOS-video x1 VIDEOvideo x1	Audio input/output port AUDIO INStereo mini x1 AUDIO OUTStereo mini x1 Others USB STORAGEUSB-A x1 SD cardSD card slot x1 USBUSB-B x1 LANRJ45 x1
Optional parts	Lamp: <CPX2> DT00781 <CPX6> DT00821 Air filter: MU03602 * Please consult your dealer.	



Projector

User's Manual - Safety Guide

Thank you for purchasing this projector.

⚠ WARNING • Before using, read these user's manuals of this projector to ensure correct usage through understanding. After reading, store them in a safe place for future reference. Incorrect handling of this product could possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals of this projector.

NOTE • The information in this manual is subject to change without notice.
• The manufacturer assumes no responsibility for any errors that may appear in this manual.
• The reproduction, transmission or use of this document or contents is not permitted without express written authority.

About The Symbols

Various symbols are used in this manual, the user's manual and on the product itself to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meanings of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.

⚠ WARNING	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
⚠ CAUTION	This symbol indicates information that, if ignored, could result possibly in personal injury or physical damage due to incorrect handling.

Typical Symbols

- ⚠** This symbol indicates an additional warning (including cautions). An illustration is provided to clarify the contents.
- 🚫** This symbol indicates a prohibited action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that disassembly is prohibited).
- ⚡** This symbol indicates a compulsory action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that the power plug should be disconnected from the power outlet).

Safety Precautions

⚠ WARNING

Never use the projector if a problem should occur.

Abnormal operations such as smoke, strange odor, no image, no sound, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. can cause a fire or electrical shock.

In such case, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer. Never attempt to make repairs yourself because this could be dangerous.

- The power outlet should be close to the projector and easily accessible.



Disconnect the plug from the power outlet.

Use special caution for children and pets.

Incorrect handling could result in fire, electrical shock, injury, burn or vision problem.

Use special caution in households where children and pets are present.



Do not insert liquids or foreign object.

Penetration of liquids or foreign objects could result in fire or electrical shock. Use special caution in households where children are present.

If liquids or foreign object should enter the projector, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

- Do not place the projector near water (ex. a bathroom, a beach, etc.).
- Do not expose the projector to rain or moisture. Do not place the projector outdoors.
- Do not place flower vases, pots, cups, cosmetics, liquids such as water, etc on or around the projector.
- Do not place metals, combustibles, etc on or around the projector.
- To avoid penetration of foreign objects, do not put the projector into a case or bag together with any thing except the accessories of the projector, signal cables and connectors.



Never disassemble and modify.

The projector contains high voltage components. Modification and/or disassembly of the projector or accessories could result in fire or electrical shock.

- Never open the cabinet.
- Ask your dealer to repair and clean insider.



Do not disassemble.

Do not give the projector any shock or impact.

If the projector should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

If the projector is shocked, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.



Do not place the projector on an unstable surface.

If the projector should be dropped and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

- Do not place the projector on an unstable, slant or vibrant surface such as a wobbly or inclined stand.
- Use the caster brakes placing the projector on a stand with casters.
- Do not place the projector in the side up position, the lens up position or the lens down position.
- In the case of a ceiling installation or the like, contact your dealer before installation.



Safety Precautions (continued)

⚠ WARNING

Be cautious of High temperatures of the projector.

High temperatures are generated when the lamp is lit. It could result in fire or burn. Use special caution in households where children are present.

Do not touch about the lens, air fans and ventilation openings during use or immediately after use, to prevent a burn. Take care of ventilation.

- Keep a space of 30 cm or more between the sides and other objects such as walls.

- Do not place the projector on a metallic table or anything weak in heat.
- Do not place anything about the lens, air fans and ventilation openings of the projector.
- Never block the air fan and ventilation openings.
- Do not cover the projector with a tablecloth, etc.
- Do not place the projector on a carpet or bedding.



Never look through the lens or openings when the lamp is on.

The powerful light could adversely affect vision.

Use special caution in households where children are present.



Use only the correct power cord and the correct power outlet.

Incorrect power supply could result in fire or electrical shock.

- Use only the correct power outlet depending on the indication on the projector and the safety standard.

- The enclosed power cord must be used depending on the power outlet to be used.



Be cautious of the power cord connection.

Incorrect connection of the power cord could result in fire or electrical shock.

- Do not touch the power cord with a wet hand.
- Check that the connecting portion of the power cord is clean (with no dust), before using. Use a soft and dry cloth to clean the power plug.
- Insert the power plug into a power outlet firmly. Avoid using a loose, unsound outlet or contact failure.



Be sure to connect with ground wire.

Connect the ground terminal of AC inlet of this unit with the ground terminal provided at the building using the correct power cord; otherwise, fire or electric shock can result.

- Don't take the core of power cord away.



Surely connect the ground wire.

Safety Precautions (continued)

WARNING

Be careful in handling the light source lamp.

The projector uses a high-pressure mercury glass lamp made of glass. The lamp can break with a loud bang, or burn out. When the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.



Please carefully read the section "Lamp".

Be careful in handling the power cord and external connection cables.

If you keep using a damaged the power cord or cables, it can cause a fire or electrical shock. Do not apply too much heat, pressure or tension to the power cord and cables.

If the power cord or cables is damaged (exposed or broken core wires, etc.), contact your dealer.



- Do not place the projector or heavy objects on the power cord and cables. Also, do not place a spread, cover, etc, over them because this could result in the inadvertent placing of heavy objects on the concealed power cord or cables.
- Do not pull the power cord and cables. When connecting and disconnecting the power cord or cables, do it with your hand holding the plug or connector.
- Do not place the cord near the heater.
- Avoid bending the power cord sharply.
- Do not attempt to work on the power cord.

Be careful in handling the battery of the remote control.

Incorrect handling of the battery could result in fire or personal injury. The battery may explode if not handled properly.



- Keep the battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.
- Do not allow the battery in a fire or water.
- Avoid fire or high-temperature environment.
- Do not hold the battery with the metallic tweezers.
- Keep the battery in a dark, cool and dry play.
- Do not short circuit the battery.
- Do not recharge, disassemble or solder the battery.
- Do not give the battery a physical impact.
- Use only the battery specified in the other manual of this projector.
- Make sure the plus and minus terminals are correctly aligned when loading the battery.
- If you observe a leakage of the battery, wipe out the flower and then replace the battery. If the flower adheres your body or clothes, rinse well with water.
- Obey the local laws on disposing the battery.

Safety Precautions (continued)

⚠ CAUTION

Be careful in moving the projector.

Neglect could result in an injury or damage.

- Do not move the projector during use. Before moving, disconnect the power cord and all external connections, and close the slide lens door or attach the lens cap.
- Avoid any impact or shock to the projector.
- Do not drag the projector.
- For moving the projector, use the enclosed case or bag if provided.



Do not put anything on top of the projector.

Placing anything on the projector could result in loss of balance or falling, and cause an injury or damage. Use special caution in households where children are present.



Do not attach anything other than specified things to the projector.

Neglect could result in an injury or damage.

- Some projector has a screw thread in a lens part. Do not attach anything other than specified options (such as conversion lens) to the screw thread.



Avoid a smoky, humid or dusty place.

Placing the projector in a smoke, a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.

- Do not place the projector near a smoky, humid or dusty place (ex. a smoking space, a kitchen, a beach, etc.). Do not place the projector outdoors.
- Do not use a humidifier near the projector.



Take care of the air filter to normal ventilate.

The air filter should be cleaned periodically. If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The projector may display the message such as "CHECK THE AIR FLOW" or turn off the projector, to prevent the internal heat level rising.



- When the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible.
- If the soiling will not come off the air filter, or it becomes damaged, replace the air filter.
- Use the air filter of the specified type only. Please order the air filter specified in the other manual of this projector to your dealer.
- When you replace the lamp, replace also the air filter. The air filter may be attached when you buy a replacement lamp for this projector.
- Do not turn on the projector without air filter.

Avoid a high temperature environment.

The heat could have adverse influence on the cabinet of the projector and other parts. Do not place the projector, the remote control and other parts in direct sunlight or near a hot object such as heater, etc.



Avoid Magnetism.

Manufacture strongly recommends to avoid any magnetic contact that is not shielded or protected on or near the projector itself. (ie., Magnetic Security Devices, or other projector accessory that contains magnetic material that has not been provided by the manufacture etc.) Magnetic objects may cause interruption of the projector's internal mechanical performance which may interfere with cooling fans speed or stopping, and may cause the projector to completely shut down.



Safety Precautions (continued)

⚠ CAUTION

Remove the power cord for complete separation.

- For safety purposes, disconnect the power cord if the projector is not to be used for prolonged periods of time.
- Before cleaning, turn off and unplug the projector. Neglect could result in fire or electrical shock.



Disconnect the plug from the power outlet.

Ask your dealer to cleaning inside of the projector about every year.

Accumulations of dust inside the projector cause result in fire or malfunction. Cleaning inside is more effective if performed before every humid periods such as rainy season.

- Do not clean inside yourself because it is dangerous.



NOTE

Do not give the remote control any physical impact.

A physical impact could cause damage or malfunction of the remote control.

- Take care not to drop the remote control.
- Do not place the projector or heavy objects on the remote control.

Take care of the lens.

- Close the slide lens door or attach the lens cap to prevent the lens surface being scratched when the projector is not used.
- Do not touch the lens to prevent fog or dirt of the lens that cause deterioration of display quality.
- Use commercially available lens tissue to clean the lens (used to clean cameras, eyeglasses, etc.). Be careful not to scratch the lens with hard objects.

Take care of the cabinet and the remote control.

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

- Use a soft cloth to clean the cabinet and control panel of the projector and the remote control. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth. Do not use undiluted detergent directly.
- Do not use an aerosol sprays, solvents, volatile substances or abrasive cleaner.
- Before using chemical wipes, be sure to read and observe the instructions.
- Do not allow long-term close contact with rubber or vinyl.

About bright spots or dark spots.

Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and such do not constitute or imply a machine defect.

Be careful of printing of the LCD panel.

If the projector continues projecting a still image, inactive images or 16:9 aspect images in case of 4:3 panel, etc., for long time, the LCD panel might possibly be printed.

Safety Precautions (continued)

NOTE

About consumables.

Lamp, LCD panels, polarizers and other optical components, and air filter and cooling fans have a different lifetime in each. These parts may need to be replaced after a long usage time.

- This product isn't designed for continuous use of long time. In the case of continuous use for 6 hours or more, or use for 6 hours or more every day (even if it isn't continuous), or repetitious use, the lifetime may be shortened, and these parts may need to be replaced even if one year has not passed since the beginning of using.
- Any inclining use beyond the adjustment range explained in these user's manuals may shorten the lifetimes of the consumables.

Before turning on the power, make the projector cool down adequately.

After turning the projector off, pushing the restart switch or interrupting of the power supply, make the projector cool down adequately. Operation in a high temperature state of the projector causes a damage of the electrode and un-lighting of the lamp.

Avoid strong rays.

Any strong ray (such as direct rays of the sun or room lighting) onto the remote control sensors could invalidate the remote control.

Avoid radio interference.

Any interfering radiation could cause disordered image or noises.

- Avoid radio generator such as a mobile telephone, transceiver, etc. around the projector.

About displaying characteristic.

The display condition of the projector (such as color, contrast, etc.) depends on characteristic of the screen, because the projector uses a liquid crystal display panel. The display condition can differ from the display of CRT.

- Do not use a polarized screen. It can cause red image.

Turn the power on/off in right order.

To prevent any trouble, turn on/off the projector in right order mentioned below unless specifying.

- Power on the projector before the computer or video tape recorder.
- Power off the projector after the computer or video tape recorder.

Take care not to fatigue your eyes.

Rest the eyes periodically.

Set the sound volume at a suitable level to avoid bothering other people.

- It is better to keep the volume level low and close the windows at night to protect the neighborhood environment.

Connecting with notebook computer

When connecting with notebook computer, set to valid the RGB external image output (setting CRT display or simultaneous display of LCD and CRT).

Please read instruction manual of the notebook for more information.

Lamp

⚠ WARNING



HIGH VOLTAGE



HIGH TEMPERATURE



HIGH PRESSURE

The projector uses a high-pressure mercury glass lamp. The lamp can break with a loud bang, or burn out, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.

About disposal of a lamp • This product contains a mercury lamp; do not put in trash. Dispose of in accord with environmental laws.

For lamp recycling, go to www.lamprecycle.org. (in USA)

For product disposal, contact your local government agency or www.eiae.org (in the US) or www.epsc.ca (in Canada).

For more information, call your dealer.

- If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.



Disconnect the plug from the power outlet

- If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- Before replacing the lamp, make sure the power switch is off and the power cable is not plugged in, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.



- Do not open the lamp cover while the projector is suspended from above. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
- Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.



- Use the lamp of the specified type only.
- If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- Using the lamp for long periods of time, could cause it dark, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, please replace the lamp as soon as possible. Do not use old (used) lamps; this is a cause of breakage.

Regulatory Notices

FCC Statement Warning

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INSTRUCTIONS TO USERS: This equipment complies with the requirements of FCC (Federal Communication Commission) equipment provided that the following conditions are met. Some cables have to be used with the core set. Use the accessory cable or a designated-type cable for the connection. For cables that have a core only at one end, connect the core to the projector.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For the Customers in CANADA

NOTICE: This Class B digital apparatus complies with Canadian ICES-003.

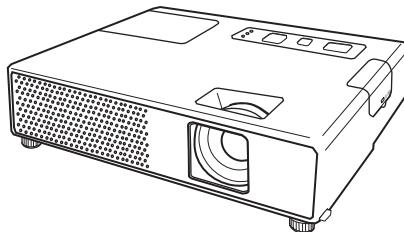
Warranty And After-Service

Unless seen any abnormal operations (mentioned with the first paragraph of WARNING in this manual), when a problem occurs with the equipment, first refer to the "Troubleshooting" section of the "Operating Guide", and run through the suggested checks. If this does not resolve the problem contact your dealer or service company. They will tell you what warranty condition is applied.

Projector

CPX2/CPX6

User's Manual – Network Functions



This manual is only intended to explain Network Functions.

⚠️ WARNING ► Before using this product, read the “User's Manual – Safety Guide” and related manuals to ensure proper use of this product. After reading them, store them in a safe place for future reference.

NOTE • The information in this manual is subject to change without notice.

- The manufacturer assumes no responsibility for any errors that may appear in this manual.
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Caution**[Restriction in terms of inserts or pulls memory card and wireless network card]**

Do not pull out the memory card and the wireless network card while the power is on. The memory card can be pulled out only while the card access LED is off.

Choose one of the following item either “REMOVE ALL”, “REMOVE SD CARD” or “REMOVE USB” that matches a media to be taken out, from projector, when you remove the SD card or USB memory. The item can be found on the menu “MIU → SERVICE”. ( *MIU Menu of the User's Manual - Operating Guide*)

 **CAUTION**

■ The accompanying IEEE802.11b/g wireless network card uses the 2.4GHz radio frequency band. You do not need a radio license to use this card, but you should be aware of the following:

● **DO NOT USE NEAR THE FOLLOWING!**

- Microwave ovens
- Industrial, scientific or medical devices
- Designated low power radio stations
- Premises radio stations

Using the wireless network card near the above may result in radio interference, which in turn may result in a decrease in communication speed and even a complete loss of communication.

● Depending on the location where you attempt to use the wireless network card, there may be interference with the radio waves, which may result in a decrease in communication speed and even a complete loss of communication. In particular, please be aware that using the wireless network card in locations where there is reinforced steel, other metals and concrete may interfere with radio communication.

● **Available Channels**

The wireless network card uses the 2.4GHz radio frequency band, but depending on the country or region you are in, you might be limited to the channels you can use. Please refer to the following table for confirming where and with what channels you may use the accompanying IEEE802.11b/g wireless network card. Please consult with your dealer for countries not included in the table.

Country or Region	Available Channel
Japan	1 to 11
USA	1 to 11
Taiwan	1 to 11
Canada	1 to 11
UK, Spain, Germany, Italy, Austria, Switzerland, Belgium, Sweden, Netherlands, Portugal, Denmark, Finland, Greece, Norway, France, Ireland, Luxembourg, Iceland	1 to 11

● You may not bring the wireless network card into countries not listed above as there is a possibility that use of the wireless network card in those countries could lead to an infringement of established radio laws.

Caution

CE 0560 !

The manufacturer (Gemtek) hereby declare that this equipment (SD wireless network card), model SD-Link11g is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

1. Main functions

1.1 Live Mode (Project images from PC)

The MIU (Multi Information processing Unit) enables “Wireless presentation” by choosing Live Mode.

The Live Mode give you an ability to display a same image that is shown on the PC through the network by using an application program “MIU Live Viewer”. (Fig.1.1.a)

The “MIU Live Viewer” captures PC screen image and sends to the projector through wired LAN or wireless LAN connection. (Refer to section 3 in detail.)

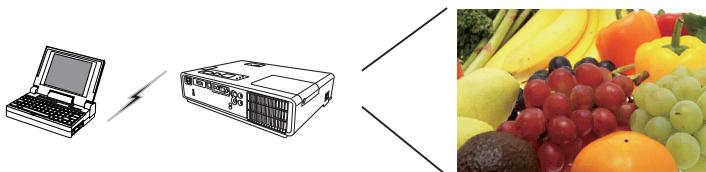


Fig. 1.1.a “MIU Live Viewer” outlines (through wireless LAN connection)

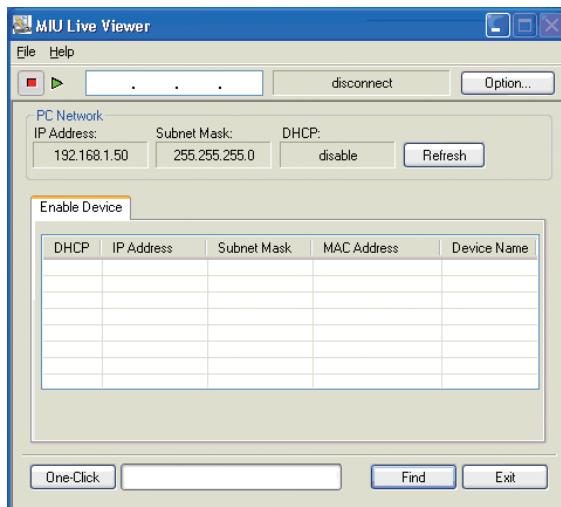


Fig. 1.1.b “MIU Live Viewer”

One projector can be connected with up to 4 PCs using “MIU Live Viewer”. (Book 52)

1.2 PC-LESS Presentation

(Display the images stored in SD Memory Card/USB memory.)

The MIU enables “PC-LESS Presentation” by choosing PC-LESS function. (Fig. 1.2.a) The PC-LESS function enables to display images that are stored in the SD Memory Card or USB memory. The “PC-LESS Presentation” has 4 types of display modes.

- 1) Thumbnail Mode: Display thumbnails stored images in SD Memory Card or USB memory. (From now on, it is called “memory card” as SD Memory Card and USB memory combined.)
- 2) Full Screen Mode: Display selected image or movie on the full screen mode.
- 3) Slide Show Mode: Display images as slideshow mode with certain interval.
- 4) Directory Tree View: Display files and folders that are stored in memory card as directory tree view.

[Supported memory devices]

- SD Memory Card
- USB memory (USB memory type, USB Hard Disk and USB card reader type)

NOTE • USB memory reader (adapter) is not supported (if the adapter acknowledges as multiple devices connected).

- The supported formats are FAT 12, FAT 16(FAT) and FAT 32. NTFS is not supported.
- USB hub is not supported.

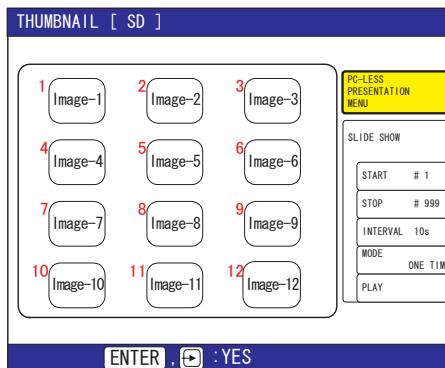


Fig. 1.2.a “PC-LESS Presentation” outlines

“PC-LESS Presentation” can be controlled via keypad on the Projector or IR Remote (図54).

You can also control using the Web remote controller, as shown in Fig. 1.2.b, which enables selecting images, switching pages and switching display modes. Web remote controller also switches mode between “Live Mode” and “PC-LESS Presentation”. (図39)

1.2 PC-LESS Presentation

(Display the images stored in SD Memory Card/USB memory.) (Continued)

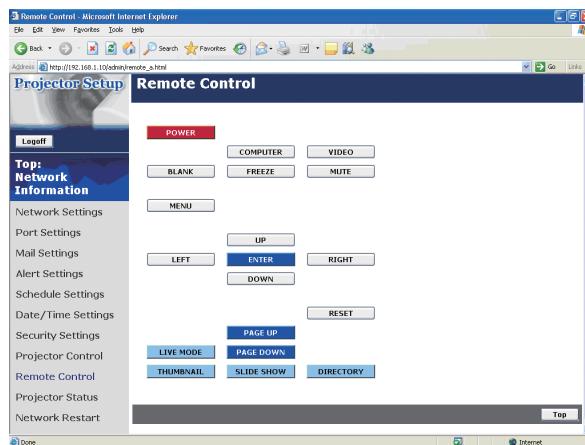


Fig. 1.2.b Remote Control

NOTE • There are several naming limitations for the folders and files.

- (1) Alphanumeric and Japanese characters are supported if the language setting is Japanese.
- (2) Alphanumeric and Latin-1 characters are supported if the language setting is NOT Japanese.

- The files may not be able to access depending on the type of USB hard disk, USB memory and USB card reader.
- It recommends to use external power supply cable if the USB hard disk drive has the power cable.

2. Equipment connection and network setting**2.1 Required equipment preparation**

Followings are required for 1 projector and 1 PC connection. Multiple PC connection is described in section 4.1.

Projector: 1 unit

PC: 1 set (“MIU Live Viewer” installation is required for “Live Mode” usage.)

IEEE802.11b/g wireless LAN equipment is required.

Depending on the type of wireless network card and PC you are using, the projector may not be able to communicate properly with your PC, even if the PC you are using is equipped with built-in wireless LAN function.

To eliminate communication problems, please procure a Wi-Fi certified wireless network card.

LAN cable (in case of wired connection): 1 piece * 1

SD Wireless Network Card (in case of wireless connection): 1 unit * 2

Memory card (in case of “PC-LESS Presentation” usage): 1 piece

* 1: When a projector and a PC are connected, use CAT-5 (or greater) LAN cable.

* 2: Access point is required when wireless LAN connection is used as Infrastructure mode.

2.2 Network connection using “One-Click-Communication” function

This section explains how to connect network using “One-Click-Communication” function. This function makes PC and projector network connection very easy without complicated settings like IP address and SSID.

* This function cannot be used when multiple PCs or multiple projectors are connected.

* The system of Windows2000 Professional Service Pack 4 or Windows XP and the administrator authority are required to use “One-Click-Communication” function. (Administrator authority)

* This function only works when the network settings of the projector is the same as factory default settings.

* This function might not work depending on your used wireless LAN driver.

If so, setup the connection manually. ( 10, 16 and refer to the User Manuals for your PC and wireless equipment.)

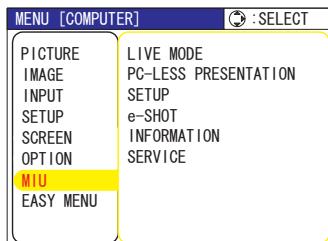
[Wired LAN connection]

1) When projector network settings such as IP address and subnet mask are changed, need to return to the projector factory default Network settings.

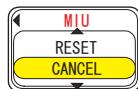
①Press the MENU button on remote control or the ▲/▼/◀/▶ button on keypad. Then OSD menu will be displayed. If Easy Menu is displayed, change the menu to Advanced Menu.

2.2 Network connection using “One-Click-Communication” function (Continued)

② Select the MIU menu by using ▲/▼ button.



③ Press the RESET button on remote control. Then Reset Menu will be displayed.



④ Press the ▲ button to reset the Network settings.

NOTE • SSID, WEP Key will be set to factory default settings.
• If you like to set these items, please set again from Web browser (41).

- 2) Connect PC and projector using LAN cable to make it ready for communication.
* In case of connecting with existing network, contact your network administrator.
- 3) Start up “MIU Live Viewer”. Window appears in Fig. 2.2.a. (41)

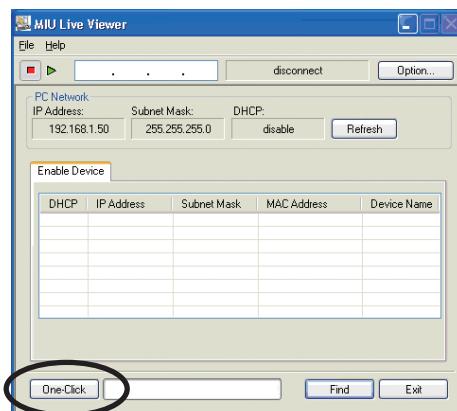


Fig. 2.2.a “MIU Live Viewer” initial window

2.2 Network connection using “One-Click-Communication” function (Continued)

- 4) Click [**One-Click**] button in Fig. 2.2.a, then projector will be found. And the capture start button  is activated, then real time display will be started automatically.

[Wireless LAN connection]

- 1) When projector network settings such as IP address and subnet mask are changed, need to return to the projector factory default settings. (8)
- 2) In case IEEE802.11b/g wireless LAN device is built-in the PC, make the LAN valid and other network connections invalid. If wireless LAN device is not built in the PC, connect IEEE802.11b/g wireless LAN device and install device driver to the PC. (Refer to the user guide for wireless LAN device details.)
- 3) Start up “MIU Live Viewer”, then the window appears (Fig. 2.2.a).
- 4) Click [**One-Click**] button in Fig. 2.2.a, then projector will be found. And the capture start button  is activated, then real time display will be started automatically.

2.3 Manual network connection setting – Wired LAN -

When you need to set the original IP address and SSID other than factory default settings, need to set up network connection manually.

This section explains how to set up network connection manually.

2.3.1. Equipments connection

At first, connect projector and PC with wired LAN connection to check PC setting and connection status. Next section explains PC settings.

Connecting projector with network using LAN cable, and then set it ready to communicate with PC.

* Connecting with existing network, contact network administrator.

At last, turn on the projector. This is the end of Equipments connection.

2.3 Manual network connection setting – Wired LAN - (Continued)

2.3.2. Network settings

This is the explanation of network connection settings for Windows XP and Internet Explorer.

- 1) Log on to Windows XP as administrator authority. (*)
- 2) Open “Control Panel” from “Start” menu.
- 3) Open “Network and Internet Connections” in “Control Panel”. (Fig. 2.3.2.a)

* Administrator authority is the account, which can access to all functions.

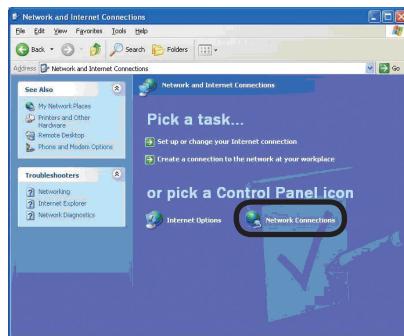


Fig. 2.3.2.a “Network and Internet Connections” window

- 4) Open “Network Connections”. (Fig. 2.3.2.b)

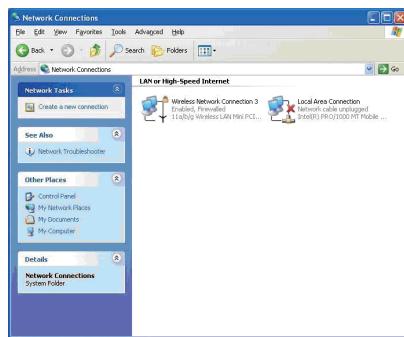


Fig. 2.3.2.b “Network Connections” window

2. Equipment connection and network setting

2.3 Manual network connection setting – Wired LAN - (Continued)

- 5) When more than 2 usable network devices exist, make only one device “Valid” that you want to use and the rest of devices “Invalid”. (In this case, “Local Area Connection” is selected.)
- 6) Open “Local Area Connection Properties” window you use for network device. (Fig. 2.3.2.c)

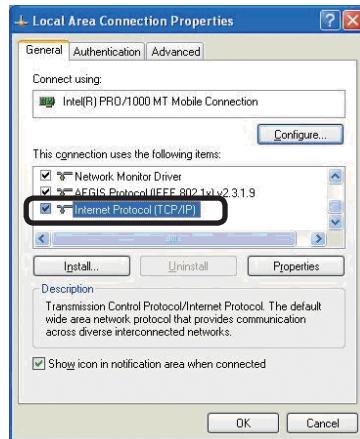


Fig. 2.3.2.c “Local Area Connection Properties” window

- 7) Set used protocol as “TCP/IP” and open “Internet Protocol (TCP/IP) Properties” window.

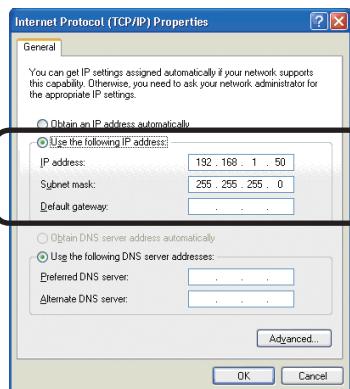


Fig. 2.3.2.d “Internet Protocol (TCP/IP) Properties” window

- 8) Set IP address, subnet mask and default gateway for PC.

2.3 Manual network connection setting – Wired LAN - (Continued)

[About IP address]

Network address of PC IP address should be common with projector's one but the PC total IP address should not be overlapped with other networked equipments.

For example, projector initial settings are as follows.

IP address: 192.168.1.10

Subnet mask: 255.255.255.0

Therefore, specify PC IP address as follows.

IP address: 192.168.1.xxx (xxx shows decimal number.)

Subnet mask: 255.255.255.0

Select from 1 to 254 for “xxx” not duplicating with any other equipments. In this case, projector has “192.168.1.10” IP address, specify from 1 to 254 except 10 for PC.

Projector IP address can be changed by using configuration utility. (19)

* “0.0.0.0” cannot be set to IP address.

When DHCP server exists in network, it is possible to set using IP address, which is automatically assigned to projector.

If projector and PC exist in the same network (i.e. network address is common), default gateway can be blank.

* DHCP is abbreviation for “Dynamic Host Configuration Protocol” and the function to provide necessary setting for network like IP address from server to client. Server that has DHCP function is called DHCP server.

* When projector and PC exist in different networks, default gateway setting is necessary. Contact network administrator in detail.

2. Equipment connection and network setting

2.3 Manual network connection setting – Wired LAN - (Continued)

2.3.3 “Internet Option” setting

- 1) Click “Internet Options” in “Network and Internet Connections” window (Fig. 2.3.3.a) to open “Internet Properties” window. (Fig. 2.3.3.b)

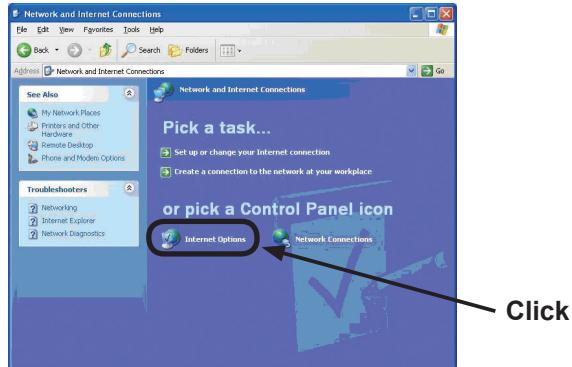


Fig. 2.3.3.a “Network and Internet Connections” window

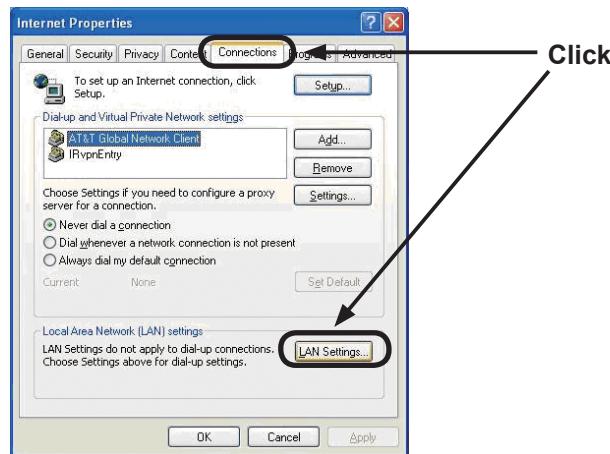


Fig. 2.3.3.b “Internet Properties” window

- 2) Click “Connections” tab and then click [LAN Settings] button to open “Local Area Network (LAN) settings”. (Fig. 2.3.3.c)

2.3 Manual network connection setting – Wired LAN - (Continued)

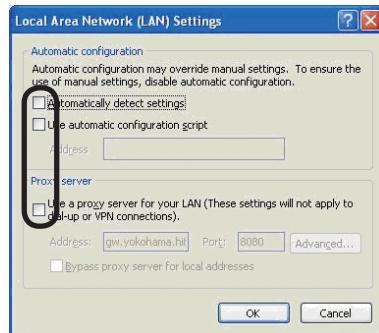


Fig. 2.3.3.c “Local Area Network (LAN) Settings” window

- 3) Uncheck all boxes in “Local Area Network (LAN) Settings” window. (Fig. 2.3.3.c)

2.3.4 Check connection

Check PC and projector are connected properly here. If it is not connected, check cable connections and settings are properly or not.

- 1) Start browser in PC and specify following URL, then click “Go” button.

URL: [http://\(Projector IP address\) /](http://(Projector IP address) /)

For example, if projector IP address is 192.168.1.10, specify

URL: <http://192.168.1.10/>

- 2) After enter your ID and password, if Fig. 2.3.4 appears, it succeeds.

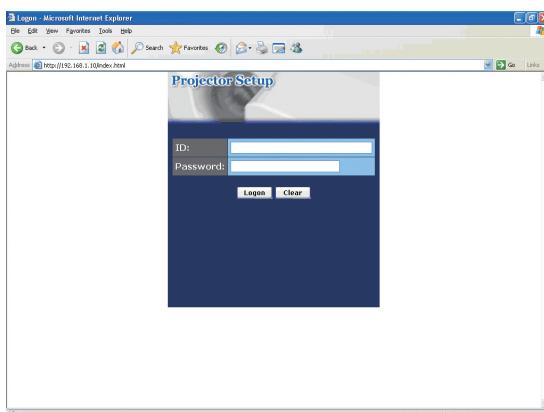


Fig. 2.3.4 “Logon Menu”

2.4 Manual network connection setting – Wireless LAN

By installing SD-Link11g card, PC and projector are able to communicate in both Ad-Hoc and Infrastructure modes.

How to set up wireless LAN connection manually.

2.4.1 Preparation for wireless LAN connection

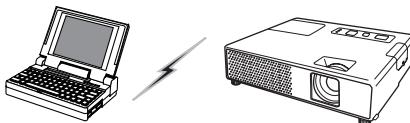


Fig. 2.4.1.a Without access point communication (Ad-Hoc)

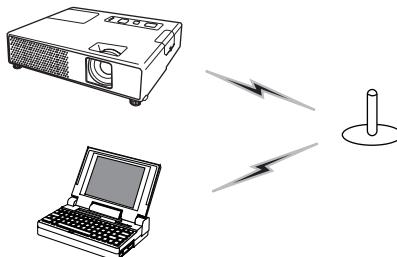


Fig. 2.4.1.b With access point communication (Infrastructure)

- * Ad-Hoc is one of the wireless LAN communication methods without having access point to communicate.
- * Infrastructure is one of the wireless LAN communication methods with having access point to communicate. If certain quantities of equipments are used, this mode is efficient.

If communicating with existing network, contact your network administrator.

First, insert the SD wireless network card into SD card slot ([Using an SD card](#) of the *User's Manual - Operating Guide*).

Then, make PC ready for wireless communication.

In case IEEE802.11b/g wireless LAN device is built-in the PC, make it valid and make other network connections invalid. If wireless LAN device is not built-in the PC, connect IEEE802.11b/g wireless LAN device and install device driver. (Refer to the user guide for PC and wireless LAN device for detail.)

2.4 Manual network connection setting – Wireless LAN (Continued)

2.4.2 Wireless LAN connection set up

Using wireless LAN utility for Windows XP standard.

Wireless LAN initial settings for the projector is as follows.

Connection Control : Ad-Hoc
 SSID : wireless
 Channel : 1ch
 Encryption rating : None
 Communication speed: AUTO
 IP address : 192.168.1.10

* You can change these settings as you want. Use configuration utility or menu to change. (Fig. 19)

1) Open "Network Connections". (Fig. 2.4.2.a)

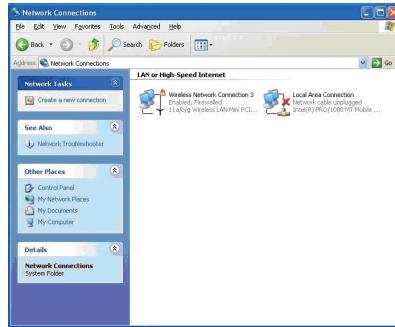


Fig. 2.4.2.a "Network Connections"

2) Make wireless network connection "Valid" and other network devices "Invalid".

3) Open "Wireless Network Connection Properties". (Fig. 2.4.2.b)

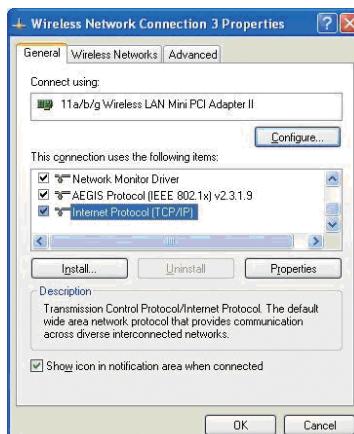


Fig. 2.4.2.b "Wireless Network Connection Properties" window (1)

2. Equipment connection and network setting

2.4 Manual network connection setting – Wireless LAN (Continued)

- 4) Set used protocol as “TCP/IP” and open TCP/IP property. Set IP address and other settings as same as wired LAN connection set up. (Fig. 12)
- 5) Open “Wireless Networks” tab. (Fig. 2.4.2.c)

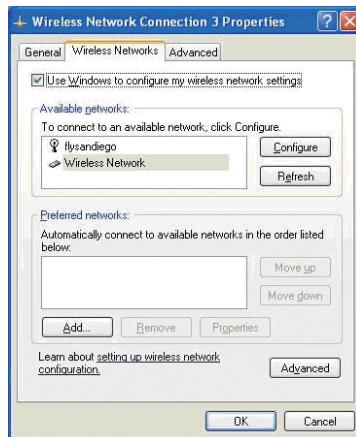


Fig. 2.4.2.c “Wireless Network Connection Properties” window (2)

- 6) Add check mark for “Use Windows to configure my wireless network settings” in “Wireless Network Connection Properties” window.
- 7) Click **[Add]** button in “Preferred networks” section in “Wireless Network Connection Properties” window (Fig. 2.4.2.c) to open “Wireless network properties” window. (Fig. 2.4.2.d)

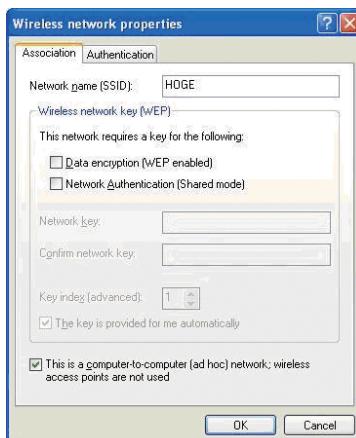


Fig. 2.4.2.d “Wireless network properties” window

2.4 Manual network connection setting – Wireless LAN (Continued)

8) Set each item as follows.

Network name (SSID): wireless

Data encryption: not enabled (Default setting is not enabled.)

* This explanation meets the projector default setting. If access point is used or data encryption is used, if needs to change settings properly. Refer to PC or wireless LAN device user guide for detailed information.

* If using the existing network via access point, contact your network administrator.

2.5 Configuring and controlling the projector via a web browser

You can adjust or control the projector via a network from a web browser on a PC that is connected to the same network.

NOTE • Internet Explorer 5.5 or higher are required.

- If JavaScript is disabled in your web browser configuration, you must enable JavaScript in order to use the projector web pages properly. See the Help files for your web browser for details on how to enable JavaScript.
- If projector is disconnected from network approx. 50 seconds, system will automatically log off. Please Re-log on to continue operations via a web browser.
- After you log on, a small blank window will appear behind the main operation window. Please do not close this small blank window. If this window is closed, the system will automatically log off after certain period of time even if an operation is being performed.

The small blank window will close when the main operation window is closed.

- The small blank window may be considered a pop-up and be blocked if you are using Windows XP Service Pack 2, or using other security software.

If Service Pack 2 blocks the window the following message will appear:

"Pop-up blocked. To see this pop-up or additional options click here..."

Please select "Temporarily Allow Pop-ups" or "Always Allow Pop-ups From This Site..." to allow the window to open.

- It is recommended that all web browser updates be installed. It is especially recommended that all users running Internet Explorer on a Microsoft Windows version prior to Windows XP Service Pack 2 install security update Q832894 (MS04-004) or the web browser interface may not be displayed correctly.

And when using an older version of Internet Explorer, during operations the browser will log out after 50 seconds.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

When configuring or controlling the projector via a web browser, an ID and password are required. There are two types of IDs, Administrator IDs and User IDs. The following chart describes the differences between user and administrator IDs.

Item	Description	Administrator ID	User ID
Network Information	Displays the projector's current network configuration settings.	✓	✓
Network Settings	Displays and configures network settings.	✓	N/A
Port Settings	Displays and configures communication port settings.	✓	N/A
Mail Settings	Displays and configures e-mail addressing settings.	✓	N/A
Alert Settings	Displays and configures failure & warning alerts.	✓	N/A
Schedule Settings	Displays and configures schedule settings.	✓	N/A
Date/Time Settings	Displays and configures the date and time settings.	✓	N/A
Security Settings	Displays and configures passwords and other security settings.	✓	N/A
Projector Control	Controls the projector.	✓	✓
Remote Control	Controls the projector like IR remote.	✓	✓
Projector Status	Displays and configures the current projector status.	✓	✓
Network Restart	Restarts the projector's network connection.	✓	N/A

Below are the factory default settings for administrator IDs, user IDs and passwords.

Item	ID	Password
Administrator ID	Administrator	<blank>
User ID	User	<blank>

2.5 Configuring and controlling the projector via a web browser (Continued)

Refer to the following for configuring or controlling the projector via a web browser. Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter

[<http://192.168.1.10/>] into the address bar of the web browser and the screen in Fig. 2.5.a will be displayed.

2) Enter your ID and password and click [Logon].

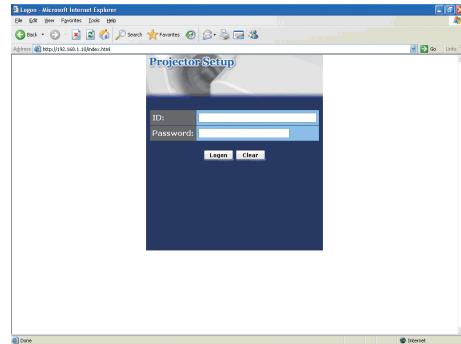


Fig. 2.5.a "Logon Menu"

If the logon is successful either the Fig.2.5.b or Fig.2.5.c screen will be displayed.

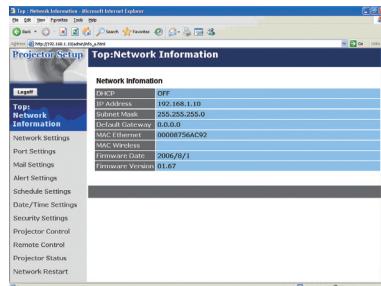


Fig. 2.5.b "Logon with administrator ID"

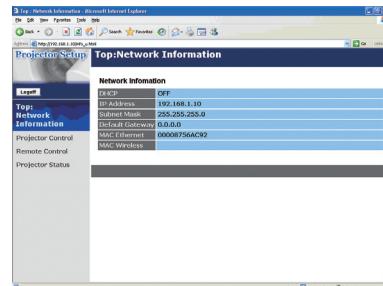


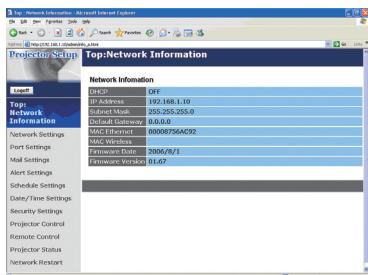
Fig. 2.5.c "Logon with user ID"

3) Click the desired operation or configuration item on the main menu located on the left-hand side of the screen (Fig. 2.5.b or Fig. 2.5.c).

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.1 Network Information



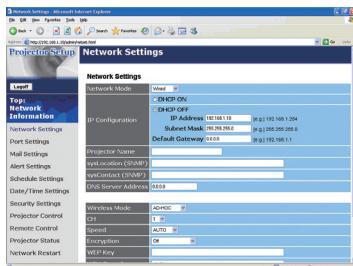
All screen images displayed in this manual are screens of a logon using an administrator ID. Any administrator only functions will not be displayed when using a user ID. Refer to the descriptions in each table.

Displays the projector's current network configuration settings.

Item	Description
DHCP	Displays the DHCP configuration settings.
IP Address	Displays the current IP address.
Subnet Mask	Displays the Subnet Mask.
Default Gateway	Displays the Default Gateway.
MAC Ethernet	Displays the Ethernet MAC address.
MAC Wireless	Displays the Wireless LAN MAC address. NOTE • MAC wireless will not be displayed when the NETWORK MODE is set to the WIRED even if the wireless network card is mounted. ( MIU Menu of the User's Manual - Operating Guide)
Firmware Date	Displays the network firmware time stamp. This information is only displayed when logged on using an administrator ID.
Firmware Version	Displays the network firmware version number. This information is only displayed when logged on using an administrator ID.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.2 Network Settings



Displays and configures network settings.

Item	Description
Network Mode	Select Network mode "Wired" or "Wireless".
IP Configuration	Configures network settings.
DHCP ON	Enables DHCP.
DHCP OFF	Disables DHCP.
IP Address	Configures the IP address when DHCP is disabled.
Subnet Mask	Configures the Subnet Mask when DHCP is disabled.
Default Gateway	Configures the Default Gateway when DHCP is disabled.
Projector Name	Configures the Projector name. The length of the Projector Name can be up to 64 alphanumeric characters. Numbers '0-9' and alphabet 'a-z', 'A-Z' and symbols can be used.
sysLocation (SNMP)	Configures the location to be referred to when using SNMP. The length of the sysLocation can be up to 255 alphanumeric characters. Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.
sysContact (SNMP)	Configures the contact information to be referred to when using SNMP. The length of the sysContact can be up to 255 alphanumeric characters. Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.
DNS Server Address	Configures the DNS Server address.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.2 Network Settings (Continued)

Item	Description
Wireless Mode	Select "AD-HOC" or "Infrastructure".
CH (Communication channel)	Select using channel between "1" and "11". NOTE • Depending on the country where you are the channels may vary. In addition, depending on the country or region where you are may be required to use a wireless network card that conform to the standards in the respective country or region.
Speed (Communication speed)	Select communication speed.
Encryption	Select data encryption method.
WEP Key	Input WEP key, which has same length defined by WEP. When "64bit" or "128bit" is selected, input 10 characters or 26 characters respectively. Only numbers from "0" to "9" and alphabets from "a" to "f" can be used. Enter the series of two characters pair. It will be cleared by 0, if the total length is odd.
WPA Passphrase	Input WPA Passphrase. Available number of input characters is 8 to 63. Only alphabets, numbers and following symbols can be used. !"#\$%&'()*+,-./[]^_`{} ~
SSID	Set SSID. Maximum number of input characters is 32. Only alphabets, numbers and following symbols can be used. !"#\$%&'()*+,-./[]^_`{} ~

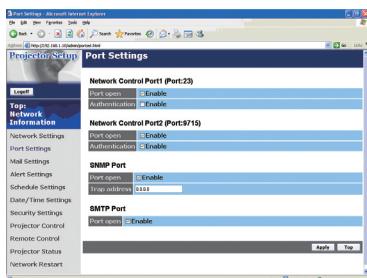
Click the **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.

- If you connect the projector to an existing network, consult a network administrator before setting server addresses.
- The WEP Key, WPA passphrase and SSID settings will not be set if the invalid characters are used.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.3 Port Settings



Displays and configures communication port settings.

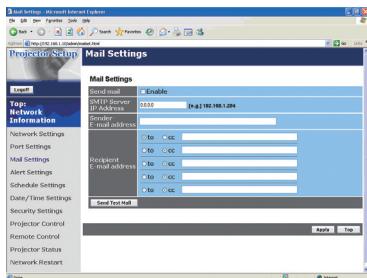
Item	Description
Network Control Port1 (Port:23)	Configures command control port 1 (Port:23).
Port open	Click the [Enable] check box to use port 23.
Authentication	Click the [Enable] check box when authentication is required for this port.
Network Control Port2 (Port:9715)	Configures command control port 2 (Port:9715).
Port open	Click the [Enable] check box to use port 9715.
Authentication	Click the [Enable] check box when authentication is required for this port.
SNMP Port	Configures the SNMP port.
Port open	Click the [Enable] check box to use SNMP.
Trap address	Configures the destination of the SNMP Trap in IP format.
SMTP Port	Configures the SMTP port.
Port open	Click the [Enable] check box to use the e-mail function.

Click the **[Apply]** button to save the settings.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.4 Mail Settings



Displays and configures e-mail addressing settings.

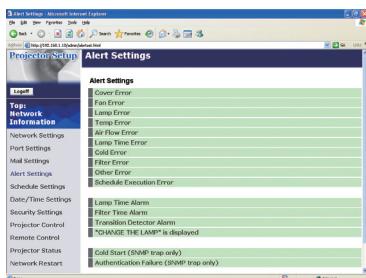
Item	Description
Send mail	Click the [Enable] check box to use the e-mail function. Configure the conditions for sending e-mail under [Alert Settings] .
SMTP Server IP Address	Configures the address of the mail server in IP format. NOTE • The address allows not only IP address but also domain name if the valid DNS server is setup in the Network Settings. The maximum length of host or domain name is up to 255 characters.
Sender E-mail address	Configures the sender e-mail address. The length of the sender e-mail address can be up to 255 alphanumeric characters.
Recipient E-mail address	Configures the e-mail address of up to five recipients. You can also specify [TO] or [CC] for each address. The length of the recipient e-mail address can be up to 255 alphanumeric characters.

Click the **[Apply]** button to save the settings.

NOTE • You can confirm whether the mail settings work correctly using the **[Send Test Mail]** button. Please enable Send mail setting before clicking **[Send Test Mail]**.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.5 Alert Settings



Displays and configures failure & warning alerts.

Alert Item	Description
Cover Error	The lamp cover has not been properly fixed.
Fan Error	The cooling fan is not operating.
Lamp Error	The lamp does not light, and there is a possibility that interior portion has become heated.
Temp Error	There is a possibility that the interior portion has become heated.
Air Flow Error	The internal temperature is rising.
Lamp Time Error	Lamp time over.
Cold Error	There is a possibility that the interior portion has become overcooled.
Filter Error	Filter time over.
Other Error	Other error. If displaying this error, please contact your dealer.
Schedule Execution Error	Schedule Execution error. (29)
Lamp Time Alarm	Lamp time over Alarm Time setting.
Filter Time Alarm	Filter time over Alarm Time setting.
Transition Detector Alarm	Transition Detector Alarm. (OPTION Menu of the User's Manual - Operating Guide)
"CHANGE THE LAMP" is displayed.	"CHANGE THE LAMP" is displayed.
Cold Start	The main power switch has been turned on. (Off → standby mode)
Authentication Failure	The SNMP access is detected from the invalid SNMP community.

Refer to "*User's Manual – Troubleshooting*" for further detailed explanation of Error except Other Error and Schedule Execution Error.

2.5 Configuring and controlling the projector via a web browser (Continued)**2.5.5 Alert Settings (Continued)**

The Alert Items are shown below.

Setting Item	Description
Alarm Time	Configures the time to alert. (Only Lamp Time Alarm and Filter Time Alarm.)
SNMP Trap	Click the [Enable] check box to enable SNMP Trap alerts.
Send Mail	Click the [Enable] check box to enable e-mail alerts. (Except Cold Start and Authentication Failure.)
Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters. (Except Cold Start and Authentication Failure.)
Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters. (Except Cold Start and Authentication Failure.)

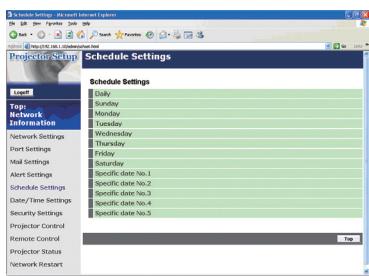
Click the **[Apply]** button to save the settings.

NOTE • The trigger of Filter Error e-mail is depending on the Filter Message settings in the SERVICE menu which defines the period of Filter Message on the projector screen. The e-mail will be sent when the filter timer exceeds 50, 100, 200 or 300 hours based on the configuration. No notification e-mail will be sent if the configuration is TURN OFF. ( **OPTION** Menu of the *User's Manual - Operating Guide*)

- Lamp Time Alarm is defined as a threshold for e-mail notification (reminder) of the lamp timer. When the lamp hour exceeds this threshold that is configured through the Web page, the e-mail will be sent out.
- Filter Time Alarm is defined as a threshold for e-mail notification (reminder) of the filter timer. When the filter hour exceeds this threshold, the e-mail will be sent out.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.6 Schedule Settings



Displays and configures schedule settings.

Item	Description
Daily	Configures the daily schedule.
Sunday	Configures the Sunday schedule.
Monday	Configures the Monday schedule.
Tuesday	Configures the Tuesday schedule.
Wednesday	Configures the Wednesday schedule.
Thursday	Configures the Thursday schedule.
Friday	Configures the Friday schedule.
Saturday	Configures the Saturday schedule.
Specific date No.1	Configures the specific date (No.1) schedule.
Specific date No.2	Configures the specific date (No.2) schedule.
Specific date No.3	Configures the specific date (No.3) schedule.
Specific date No.4	Configures the specific date (No.4) schedule.
Specific date No.5	Configures the specific date (No.5) schedule.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.6 Schedule Setting (Continued)

The daily and weekly event items are shown below.

Item	Daily & Weekly Description
Schedule	Click the [Enable] check box to enable the scheduling.
Schedule List	Displays the current schedule.

The specific date event items are shown below.

Item	Specific date (No.1-5) Description
Schedule	Click the [Enable] check box to enable specific date (No.1-5) scheduling.
Date (Month/Day)	Configures the Month and date.
Schedule List	Displays the current specific date (No.1-5) schedule.

Click the **[Apply]** button to save the settings.

To add additional functions and events click the **[Add]** button and set the following items.

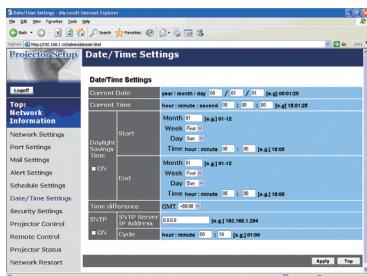
Item	Description
Time	Configures the time to execute commands.
Command [Parameter]	Configures the commands to be executed.
Power	Configures the parameters for power control.
Input Source	Configures the parameters for input switching.
Display Image	Configures the parameters for display of transfer image data.

Click the **[Register]** button to add new commands to the Schedule List.

Click the **[Delete]** button to delete commands from the Schedule List.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.7 Date/Time Settings



Displays and configures the date and time settings.

Item	Description
Current Date	Configures the current date in year/month/day format.
Current Time	Configures the current time in hour:minute:second format.
Daylight Savings Time	Click the [ON] check box to enable daylight savings time and set the following items.
Start	Configures the date and time daylight savings time begins.
Month	Configures the month daylight savings time begins (1~12).
Week	Configures the week of the month daylight savings time begins (First, 2, 3, 4, Last).
Day	Configures the day of the week daylight savings time begins (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
Time [hour]	Configures the hour daylight savings time begins (0 ~ 23).
Time [minute]	Configures the minute daylight savings time begins (0 ~ 59).
End	Configures the date and time daylight savings time ends.
Month	Configures the month daylight savings time ends (1 ~ 12).
Week	Configures the week of the month daylight savings time ends (First, 2, 3, 4, Last).
Day	Configures the day of the week daylight savings time ends (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
Time [hour]	Configures the hour daylight savings time ends (0 ~ 23).
Time [minute]	Configures the minute daylight savings time ends (0 ~ 59).

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.7 Date/Time Settings (Continued)

Item	Description
Time difference	Configures the time difference. Set the same time difference as the one set on your PC. If unsure, consult your IT manager.
SNTP	Click the [ON] check box to retrieve Date and Time information from the SNTP server and set the following items.
SNTP Server IP Address	Configures the SNTP server address in IP format. NOTE • The address allows not only IP address but also domain name if the valid DNS server is setup in the Network Settings. The maximum length of host or domain name is up to 255 characters.
Cycle	Configures the interval at which to retrieve Date and Time information from the SNTP server. (hours:minutes).

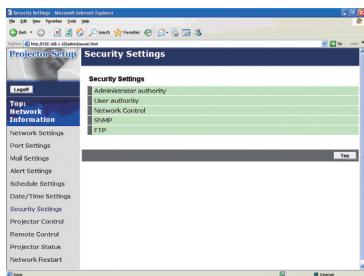
Click the **[Apply]** button to save the settings.

NOTE • If you connect the projector to an existing network, consult a network administrator before setting server addresses.

- To enable the SNTP function, the time difference must be set.
- The projector will retrieve Date and Time information from the time server and override time settings when SNTP is enabled.
- The Internal Clock's time may not remain accurate. Using SNTP is recommended to maintain accurate time.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.8 Security Settings



Displays and configures passwords and other security settings.

Item	Description
Administrator authority	Configures the Administrator ID and Password.
Administrator ID	Configures the Administrator ID. The length of the text can be up to 32 alphanumeric characters.
Administrator Password	Configures the Administrator Password. The length of the text can be up to 255 alphanumeric characters.
Re-enter Administrator Password	Used to re-enter the above password for verification.
User authority	Configures the User ID and Password.
User ID	Configures the User ID. The length of the text can be up to 32 alphanumeric characters.
User Password	Configures the User Password. The length of the text can be up to 255 alphanumeric characters.
Re-enter User Password	Used to re-enter the above password for verification.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.8 Security Settings (Continued)

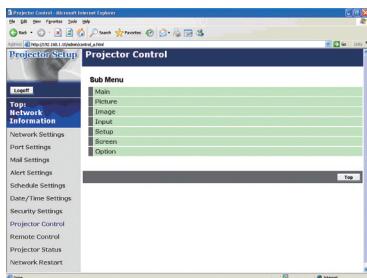
Item	Description
Network Control	Configures the Authentication Password for the command control.
Authentication Password	Configures the Authentication Password. The length of the text can be up to 32 alphanumeric characters.
Re-enter Authentication Password	Used to re-enter the above password for verification.
SNMP	Configures the community name if SNMP is used.
Community name	Configures the community name. The length of the text can be up to 64 alphanumeric characters.
FTP	Configures the FTP user and password.
User	Configures the user name. The length of the text can be up to 32 alphanumeric characters.
Password	Configures the password. The length of the text can be up to 32 alphanumeric characters.
Re-enter Password	Use to re-enter the above password for verification.

Click the **[Apply]** button to save the settings.

NOTE • Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.9 Projector Control



The items shown in the table below can be performed using the **[Projector Control]** menu. Select an item using the up and down arrow keys on the PC.

Most of the items have a submenu. Refer to the table below for details.

NOTE • The setting value may not match with the actual value if the user changes the value manually. In that case, please refresh the page by clicking **[Refresh]** button.

Controls the projector.

Item	Description
Main	
Power	Turns the power On/Off.
Input Source	Selects the input source.
Picture Mode	Selects the Picture Mode setting.
Blank On/Off	Turns Blank On/Off.
Mute	Turns Mute On/Off.
Freeze	Turns Freeze On/Off.
Magnify	Controls the Magnify setting. In some input signal sources, it might stop "Magnify" even though it does not reach to maximum setting value. The variable range: <ul style="list-style-type: none">• For a computer, component or MIU signal 0-48• For a video or s-video signal 0-16
Picture	
Brightness	Adjusts the Brightness setting.
Contrast	Adjusts the Contrast setting.
Gamma	Selects the Gamma setting.
Color Temp	Selects the Color Temp setting.
Color	Adjusts the Color setting.
Tint	Adjusts the Tint setting.
Sharpness	Adjusts the Sharpness setting.
MyMemory Save	Saves the MyMemory data.
MyMemory Recall	Recalls the MyMemory data.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

2.5.9 Projector Control (Continued)

Item	Description
Image	
Aspect	Selects the Aspect setting.
Over Scan	Adjusts the Over Scan setting.
V Position	Adjusts the V Position.
H Position	Adjusts the H Position.
H Phase	Adjusts the H Phase.
H Size	Adjusts the H Size.
Auto Adjust Execute	Performs Auto Adjustment.
Input	
Progressive	Selects the progressive setting.
Video NR	Selects the Video NR setting.
Color Space	Selects the Color Space.
C-Video Format	Selects the Video Format setting.
S-Video Format	Selects the S-Video Format setting.
Frame Lock	Turns the Frame lock function On/Off.
Computer in	Selects the computer input signal type.
Setup	
Auto Keystone Execute	Performs the Automatic keystone distortion correction.
Keystone	Adjusts the Vertical Keystone setting.
Whisper	Selects the Whisper mode.
Mirror	Selects the Mirror status.
Volume	Adjusts the Volume setting.
Audio-MIU	Assigns the Audio-MIU input terminal.

2.5 Configuring and controlling the projector via a web browser (Continued)

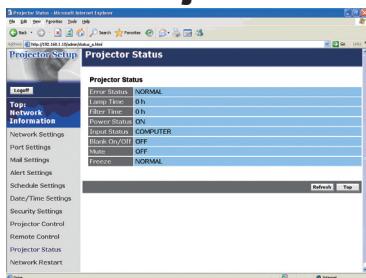
2.5.9 Projector Control (Continued)

Item	Description
Screen	
Language	Selects the Language for the OSD.
Menu Position V	Adjusts the vertical Menu Position.
Menu Position H	Adjusts the horizontal Menu Position.
Blank	Selects the Blank mode.
Startup	Selects the Startup screen mode.
MyScreen Lock	Turns MyScreen lock function On/Off.
Message	Turns the Message function On/Off.
Option	
Auto Search	Turns the Automatic signal search function On/Off.
Auto Keystone	Turns the Automatic keystone distortion correction function On/Off.
Auto on	Turns the Auto on function On/Off.
Auto off	Configures the timer to shut off the projector when no signal is detected.
My Button-1	Assigns the functions for the MY BUTTON1 buttons on the included remote control.
My Button-2	Assigns the functions for the MY BUTTON2 buttons on the included remote control.
Remote Freq. Normal	Enables/Disables Remote Frequency Normal.
Remote Freq. High	Enables/Disables Remote Frequency High.

2. Equipment connection and network setting

2.5 Configuring and controlling the projector via a web browser (Continued)

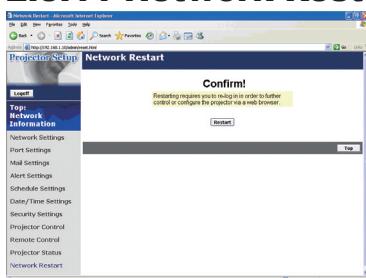
2.5.10 Projector Status



Displays and configures the current projector status.

Item	Description
Error Status	Displays the current error status
Lamp Time	Displays the usage time for the current lamp.
Filter Time	Displays the usage time for the current filter.
Power Status	Displays the current power status.
Input Status	Displays the current input signal source.
Blank On/Off	Displays the current Blank On/Off status.
Mute	Displays the current Mute On/Off status.
Freeze	Displays the current Freeze status.

2.5.11 Network Restart



Restarts the projector's network connection.

Item	Description
Restart	Restarts the projector's network connection in order to activate new configuration settings.

NOTE • Restarting requires you to re-log on in order to further control or configure the projector via a web browser. Wait 10 seconds or more after clicking [**Restart**] button to log on again in order to further control or configure the projector via a web browser.

2.5.12 Logoff

When [**Logoff**] button is clicked, the logon screen is displayed (☞21 : Fig. 2.5.a).

2.6 Utilize Web Remote Control

You can use your Web browser to remote control the projector once the projector is properly configured and connected to your PC via the wireless network card or via wired LAN.

NOTE • Do not attempt to control the projector with the projector's remote control and via your Web browser at the same time. Attempt to do so may causes a projector operational error.

Open browser when it is possible to communicate with projector. Corresponding browser is Internet Explorer 5.5 or later.

Specify http://(projector IP address)/ to start.

For example, http://192.168.1.10/

(Input this URL when IP address is not changed.)

After start up, enter your ID and password, and click **[Logon]**. Following window appears as shown in Fig. 2.6.a.

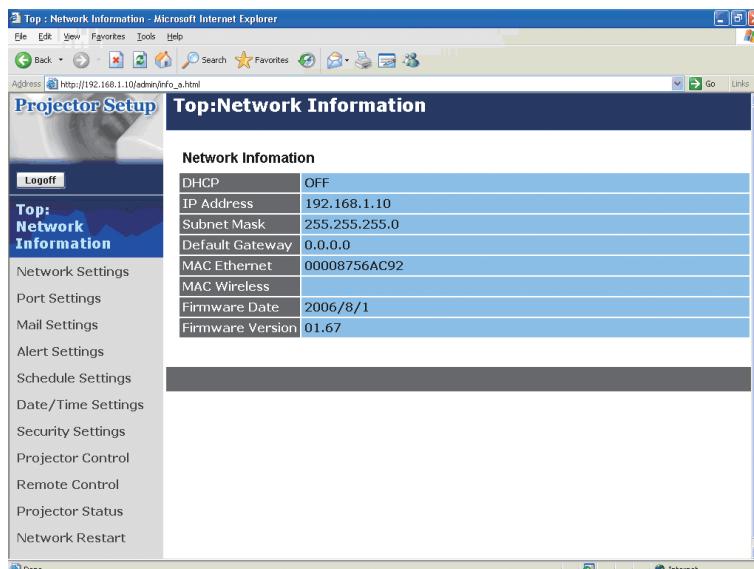


Fig. 2.6.a Utility selection window for Web Remote Control

2. Equipment connection and network setting

2.6 Utilize Web Remote Control (Continued)

Click “Remote Control” in this window to display Web Remote Control as shown in Fig.2.6.b.

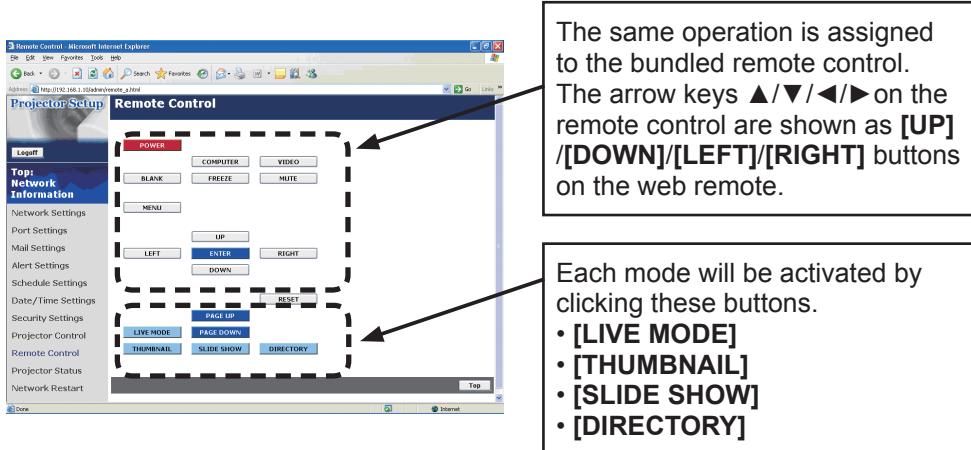


Fig. 2.6.b Web Remote Control

NOTE • Web Remote Control does not support repeat function when it is kept clicking.

- Since automatic repeat function is not available, click the button necessary times to reach your demand.
- If you click the button continuously, some command will not be transferred. Wait for a while, and Click again.
- When the [POWER] button is pushed, a message window comes up to confirm the operation. If you wish to turn it off, push [OK], otherwise push [CANCEL].
- [PAGE DOWN] and [PAGE UP] buttons on web remote control can not be used as mouse emulation function of the projector.

3. How to use Projector software – Basics -

3.1 How to use “MIU Live Viewer”

This section explains how to use the “MIU Live Viewer”.

3.1.1 Install “MIU Live Viewer”

In order to use the projector with a PC for Live Mode, you will first need to install the accompanying software on all the PCs you will be using.

Minimum PC Hardware and Software Requirements

- OS: Windows 2000 Professional Service Pack4, Windows XP Home Edition/Professional
- Graphic Interface: DirectX 6.1a or higher; Video RAM 4MB or higher (8MB recommended)
- CPU: Pentium III (600MHz or higher recommended)
- Display: VGA 640x480 or higher (XGA 1024x768 recommended) 65,536 simultaneous colors or higher

NOTE • Set your PC's resolution to XGA or less.

- In some cases, Screen will not be displayed correctly. If the received image resolution is larger than 1024x768, projector can display only the 1024x768 portion of the image.
- Images might not been transmitted, caused by OS version or the driver software for Network Adaptor.

It is highly recommended that OS and the driver should be updated to the latest.

- Memory: 64MB or higher (128MB or higher if using Windows XP)
- Available Hard Disk Space: 10MB or higher
- Web browser: Internet Explorer® (5.5 or higher)
- CD-ROM drive

- PC with PC card slot (PCMCIA Type-II) interface and IEEE802.11b/g wireless LAN PC card or PC with USB Interface and IEEE802.11b/g wireless LAN USB adaptor.

NOTE • Not required for PCs with built-in 802.11g wireless LAN.

- Depending on the type of wireless network card and PC you are using, the projector may not be able to communicate properly with your PC, even if the PC you are using is equipped with built-in wireless LAN functionality. Should communication problems occur, please procure a Wi-Fi certified wireless network card.

3.1 How to use “MIU Live Viewer” (Continued)

3.1.2 Software Installation Procedure

- 1) Turn on the PC.
- 2) Shut down all applications.
- 3) Insert the accompanying CD-ROM into the PC's CD-ROM drive.
- 4) After a moment, the Welcome to MIU Utilities Setup dialog will appear as shown on the right. Press **[Next]**.



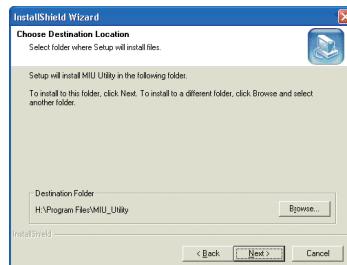
NOTE If the Welcome to MIU Utilities Setup dialog doesn't appear, proceed as follows:

- (1) Click on the **[Start]** button on the toolbar and select “Run”.
- (2) Enter **E:\software\setup.exe** and then press **[OK]**.

↑
If your CD-ROM drive is not drive E on your PC, you will need to replace E with the correct drive letter assigned to your CD-ROM drive.

If software has been already installed, Uninstallation will be done. Click the **[Cancel]** button, then uninstallation will be canceled. If you uninstalled the software by miss-operation, please re-install the software from first procedure.

- 5) The License Agreement dialog appears. If you accept it, press the **[Yes]**.
- 6) The Choose Destination Location dialog appears. Press **[Next]**.



NOTE • The C:\Program Files\MIU_Utility folder will be created and the program will be installed into that folder. If you wish to install to a different folder, click **[Browse]** and select another folder.

- 7) Confirm the program folder name. If “MIU_Utility” is okay, press **[Next]** to continue. If not, enter the desired folder name and then press **[Next]**.



3.1 How to use “MIU Live Viewer” (Continued)

- 8) The Hardware Installation dialog appears. Press Continue Anyway.
- 9) After a moment, installation will complete and the Setup Complete dialog will appear as shown on the right. Click **[Finish]**. This completes the software installation. Then your PC automatically restarts.
- (1) To confirm that the software as been properly installed, press the **[Start]** button on the toolbar, select All Programs and then select the MIU Utility folder.
- (2) MIU Live Viewer will appear in that folder if the installation was successful.



3.1.3 Explanation of “MIU Live Viewer”

Double click “MIU_LiveViewer.exe” to start up. Fig. 3.1.3.a appears on your screen.

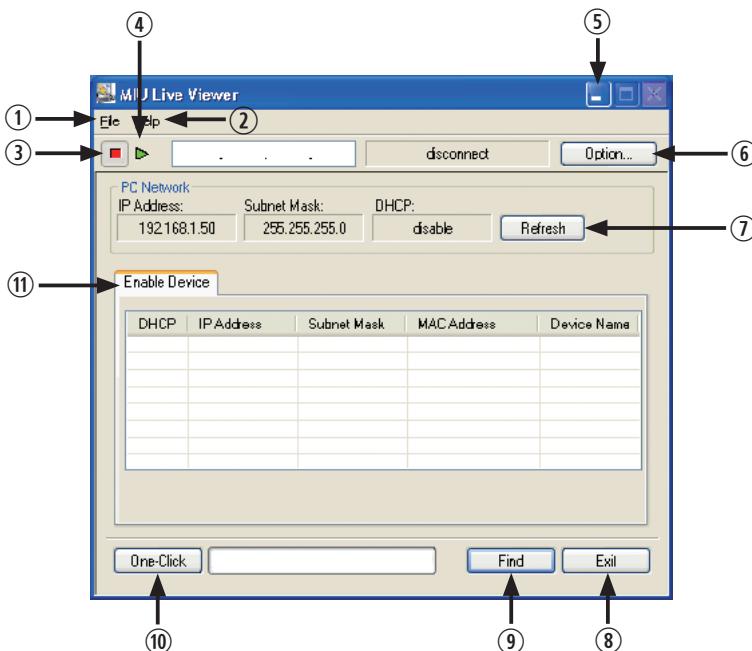


Fig. 3.1.3.a “MIU Live Viewer” Window

3.1 How to use “MIU MIU Live Viewer” (Continued)

[“MIU Live Viewer” window: Fig. 3.1.3.a]

- 1) “File” menu
Display file menu.
- 2) “Help” menu
Display “MIU Live Viewer” information.
- 3) Stop button
Stop real time display.
- 4) Capture start button
Start real time display.

NOTE • Pictures are not displayed correctly when the start/stop buttons are clicked repeatedly.

- 5) Minimize button
Close “MIU Live Viewer” window and display “MIU Live Viewer” as icon on the task tray.
- 6) **[Option]** button
Display Option window.
- 7) **[Refresh]** button
Refresh the current PC network setting.
- 8) **[Exit]** button
Terminate “MIU Live Viewer”.
- 9) **[Find]** button
Search connectable projectors.
- 10) **[One-Click]** button
Connect projector and PC without network setting of the PC.
- 11) “Enable Device”
Display network-connectable projector list.

3.1 How to use “MIU Live Viewer” (Continued)

[“Options” window]

[“General” tab, Fig. 3.1.3.b]

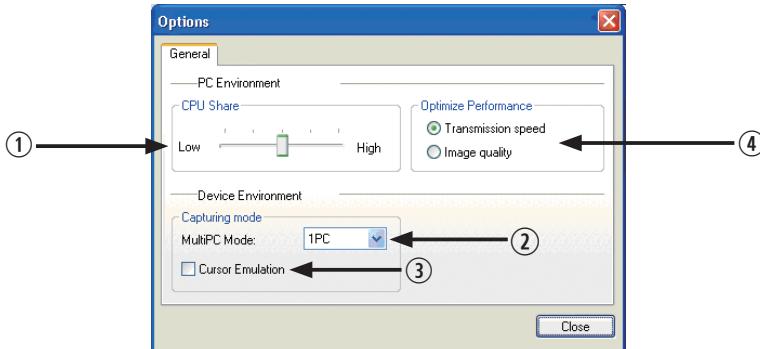


Fig.3.1.3.b “Options”, “General” tab

1) CPU Share

Set up any capturing performance on the PC screen by using control bar.

Low (At the far left): Set this position when many CPU resources are required by applications other than “MIU Live Viewer”. This setting is not good for displaying frequently changed patterns due to decrease in screen refresh rate by “MIU Live Viewer” performance degrading.

High (At the far right): Set this position when “MIU Live Viewer” requires many CPU resources. Screen refresh rate increases when “MIU Live Viewer” is used, but decreases the speed of other application speed.

2) MultiPC Mode

Select connected PC quantity from 1PC to 4PCs.

3) Cursor Emulation

Enabling this function “ON”, display cursor (pointer) prepared by this projector when cursor is not displayed on output screen. Take out check mark to make it “OFF” when PC and projector both cursors are displayed.

4) Optimize Performance

Set optimization type. You can choose from optimizing transmission speed or image quality by clicking the radio button.

Transmission speed: Optimizes the speed of transmission.

Image quality: Optimizes the quality of image.

3.1 How to use “MIU Live Viewer” (Continued)

[Icon in task tray]

To display “MIU Live Viewer” icon in task tray, click Minimize button in “MIU Live Viewer” window. The icon with yellow thunder mark shows that communication is connected, and it with red cross mark shows that it is disconnected. (Fig. 3.1.3.d shows while communication is connected.)

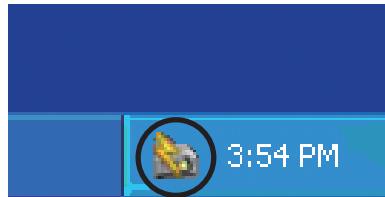


Fig. 3.1.3.d Icon in task tray

Double click “MIU Live Viewer” icon in task tray to display “MIU Live Viewer” window.

3.1 How to use “MIU Live Viewer” (Continued)

3.1.4 Utilize “MIU Live Viewer” – Basic -

This section explains basic of how to use “MIU Live Viewer” functions.

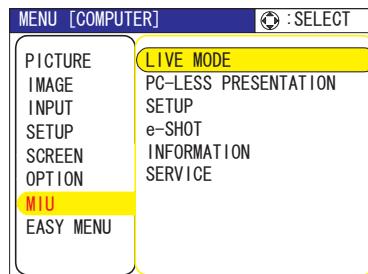
- Before start up the “MIU Live Viewer”, you have to set the projector into LIVE MODE by either of following way.

1) from Web Remote Control

(1) Click **[LIVE MODE]** button.

2) from OSD Menu

- (1) Open the OSD menu by pressing **▲/▼/◀/▶** Keypad button on the projector or **MENU** button on remote control.
- (2) Select the MIU menu by remote control or Keypad.
- (3) Select the **LIVE MODE** in MIU Menu, and press the **▶** button on Keypad on the projector or **ENTER** button on remote control.



- After setting to the projector into LIVE MODE.

1) Start “MIU Live Viewer”. If “MIU Live Viewer” installation is not completed, install it referring to 3.1.1 Install “MIU Live Viewer”.

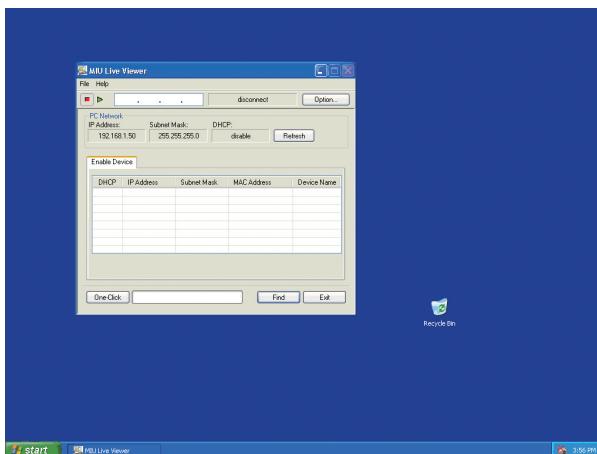


Fig. 3.1.4.a Screen after “MIU Live Viewer” starting up

3. How to use Projector software – Basics -

3.1 How to use “MIU Live Viewer” (Continued)

- 2) Start Web Remote Control (図39), and click [LIVE MODE] button on Web Remote Control to change projector mode to “MIU Live Viewer”. After changing, screen of the output monitor connected with projector turn all blue.
- 3) Perform following operations on “MIU Live Viewer”
 - (1) Click [Find] button to search communication available projector. If any projector is not found at “Enable Device” tab, try search again after referring section 2.

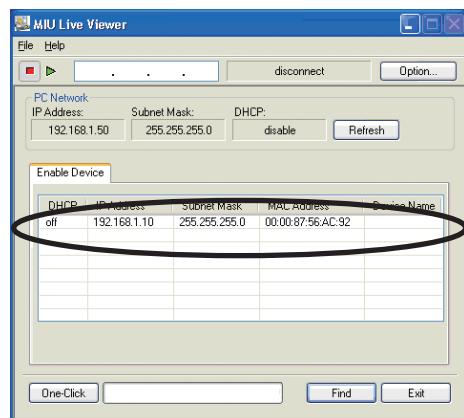


Fig. 3.1.4.b Projector search result display (1)

- (2) When communication available projector is found at 1), click the found projector to select

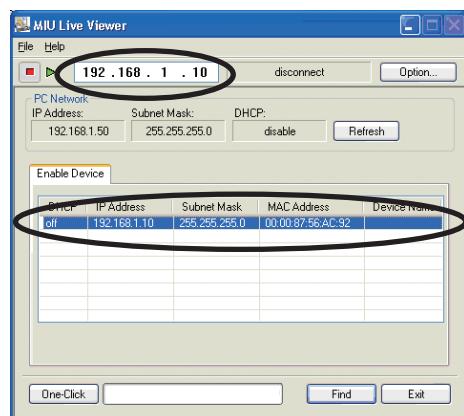


Fig. 3.1.4.c Projector search result display (2)

3.1 How to use “MIU Live Viewer” (Continued)

(3) Click Capture start button.

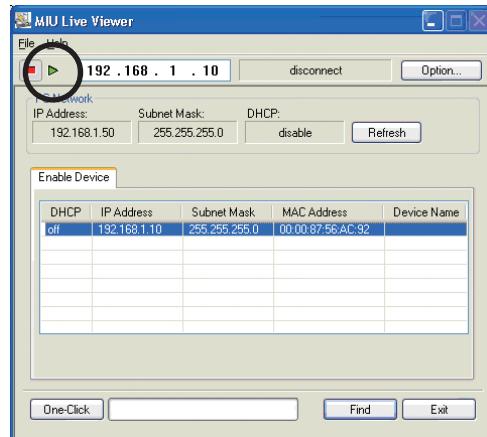


Fig. 3.1.4.d Start capturing

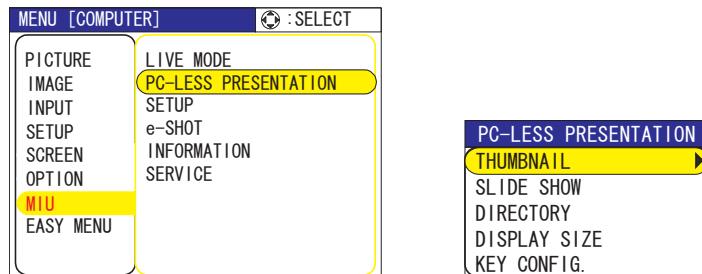
Based on the above operation, if captured picture of PC screen is displayed real time on monitor connected with projector, it is succeeded. Much easier to connect if you utilize “One-Click-Communication” function. (図8)

This is basic usage. Refer to section 4.1 for further explanation of advanced MIU Live Viewer usage.

3.2 Utilize “PC-LESS Presentation” – Basic -

Explain basics of how to utilize “PC-LESS Presentation”.

- 1) Save JPEG picture files into root directory in SD Memory Card or USB memory. Insert SD Memory Card into SD card slot on projector or insert USB memory into USB STORAGE port on projector ([Using a USB storage](#) or [Using an SD card](#) of the *User's Manual - Operating Guide*).
- 2) Open the OSD menu from the MENU button on the remote control or ▲/▼/◀/▶ button on Keypad.
- 3) Select the PC-LESS PRESENTATION item on the MIU Menu. And press the ENTER button on the remote control or ▶ button on Keypad. Then PC-LESS PRESENTATION Menu appears.



- 4) Select THUMBNAIL on PC-LESS PRESENTATION Menu. And press the ENTER button on remote control or ▶ button on Keypad. Then thumbnail appears.

If thumbnail appears by above operation, it is succeeded. (Fig.3.2.a) This is basic usage. There are varieties of usage for “PC-LESS Presentation”. Refer to section 4.2 for further detailed explanation.

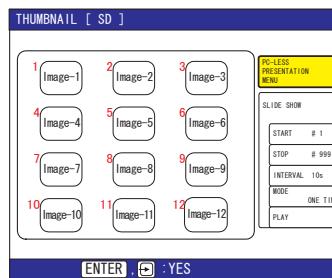


Fig. 3.2.a Thumbnail Mode

3.2 Utilize “PC-LESS Presentation” –Basic - (Continued)

You can also activate “PC-LESS Presentation” from the Web Remote Control.

- 1) Save JPEG picture files into root directory in SD Memory Card or USB memory. Insert SD Memory Card into SD card slot on projector or insert USB memory into USB STORAGE port on projector ([Using a USB storage](#) or [Using an SD card](#) of the *User's Manual - Operating Guide*).
- 2) Connecting as network refer to section 2 and start the Web Remote Control.
- 3) Click **[THUMBNAIL]** button on the Web Remote Control to change projector mode to “PC-LESS Presentation”. Then thumbnail appears.

To remove the SD card or USB memory,

- 4) Be sure to perform the REMOVE procedure using the SERVICE item in the MIU menu ([MIU Menu](#) of the *User's Manual - Operating Guide*). When an error dialog appears in the procedure, please re-perform the procedure after waiting for a while.
- 5) When you remove the SD wireless network card, be sure to turn the projector off.
- 6) Remove the SD card or USB Memory. For removing the SD card, remove the SD card slot cover before, and put the cover back after.

⚠ Caution • Do not pull out memory card while file is accessed.

- SDHC(4GB etc) SD Memory Card is not supported. UP to 2GB.
- Some SD Memory Cards and/or USB memories will not work correctly.
- Security USB memory is not supported.

4. Utilize projector – Advanced -

4.1 Utilize “MIU Live Viewer” – Advanced -

This section explains how to connect multiple PCs.

4.1.1 Connect multiple PCs with one projector (Multiple PCs connection)

A projector can be connected with up to 4 PCs to display multiple windows.

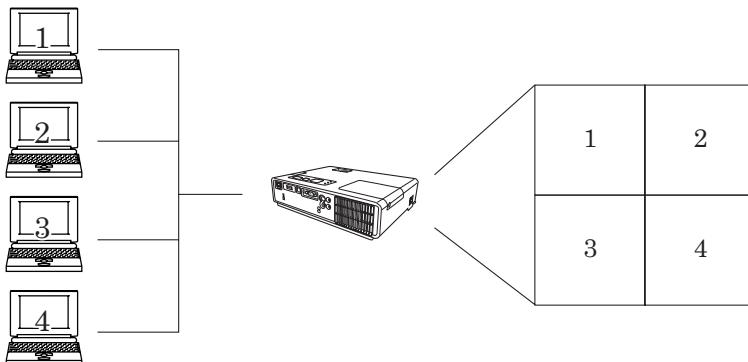


Fig. 4.1.1.a Multiple PCs connection outline

Followings are required for multiple PCs connection.

- From 2 to 4 PCs (“MIU Live Viewer” installation is required to all PCs to connect.)
- Projector: 1 unit
- CAT-5 (or greater) LAN cable: Required qty*
- Ethernet hub

* It is required to make all wireless PCs enabling wireless communication when doing multiple PCs connection as wireless LAN connection. SD-Link11g card for projector is required. If it is communicated by Infrastructure mode, access point is necessary. (16)

4.1 Utilize “MIU Live Viewer” – Advanced - (Continued)

[Connection]

- 1) Connect all PCs and projector using LAN cables and hub as shown in Fig. 4.1.1.a.
- 2) Start up “MIU Live Viewer” in each PC. Check the IP address in PCs and confirm xxx of [192.168.1.xxx] in IP address is set different value in each PC.
- 3) Click **[Find]** button in “MIU Live Viewer” and search projector.
- 4) When projector is found, click **[Option]** button in “MIU Live Viewer”. Then open “General” tab and select the number of PCs to connect as “MultiPC Mode”.
After selecting, click **[Close]** button.
- 5) Click Capture Start button.
- 6) Repeat from 3) to 5) to all PCs.

* Display screen priority

In case of multiple PCs connection, priority is decided automatically comparing when each PC is connected. In each mode, priority is as shown in Fig. 4.1.1.b. (Smaller number is prioritized.)

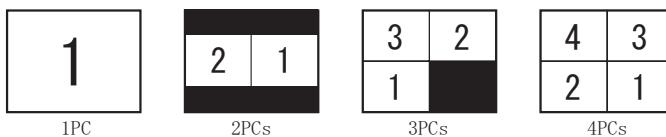


Fig. 4.1.1.b Priority in each mode

Detailed conditions and specifications for priority are as follows.

- The PC that connects later has the highest priority.
- When “MultiPC Mode” (2 to 4 PCs) is changed to 1 PC, changed 1 PC has the highest priority.
- “MultiPC Mode” can be changed settings freely even the PC is communicating.
- When the number of selected PC is smaller than the number of connected PC, lower priority PC screens are not displayed, but connections with projector are kept. When more than 5 PCs are connected with projector, lower priority PC connection is disconnected.

NOTE • If Multi PC is selected and the screen resolution which one of connected PCs has is changed, the PC will be given the highest priority and the mode (1 to 4PCs) set on the PC will be effective on the projector.

- On “MultiPC Mode” (2 to 4 PCs), the image resolution of each screen is 1/4 of the original, so small letters or lines might be illegible. It is recommended to use letters as large as possible.

4.2 Utilize “PC-LESS Presentation” – Advanced -

“PC-LESS Presentation” reads image data from memory cards inserted into SD CARD slot or USB STORAGE port and perform followings.
SD Memory and SD wireless network card can not be inserted at the same time.

- Thumbnail Mode ([55](#))
- Full Screen Mode ([57](#))
- Slide Show Mode ([59](#))
- Directory Tree View ([61](#))

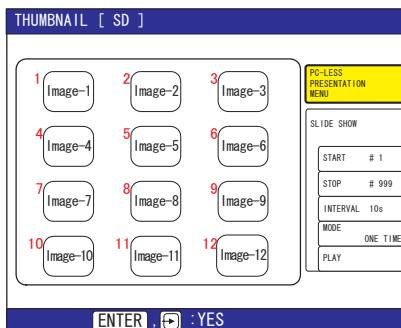


Fig. 4.2.a Thumbnail Mode



Fig. 4.2.b Full Screen Mode



Fig. 4.2.c Slide Show Mode

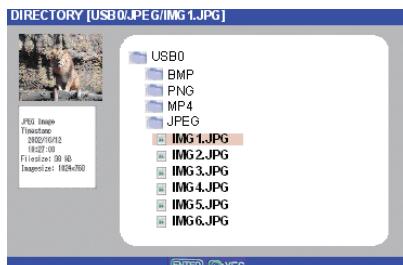


Fig. 4.2.d Directory Tree View

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following picture and movie files can be displayed.

- JPEG (.jpeg, .jpg) * Progressive is not corresponded.
- Bitmap (.bmp) * 16bit mode and compressed bitmap is not corresponded.
- PNG (.png) * Interlace PNG is not corresponded.
- MPEG4 (.mp4) * Supported bit resolution rate is less than 1Mbps in Simple Profile.
Supported resolution is less than VGA.
Supported Audio format is only AAC.

4.2.1 Thumbnail Mode

Fig.4.2.1 shows Thumbnail mode. You can display thumbnail from the OSD menu using remote control or keypad, or by clicking [THUMBNAIL] button in the Web Remote Control. Refer to [3.2 Utilize “PC-LESS Presentation” - Basic](#) - in detail.

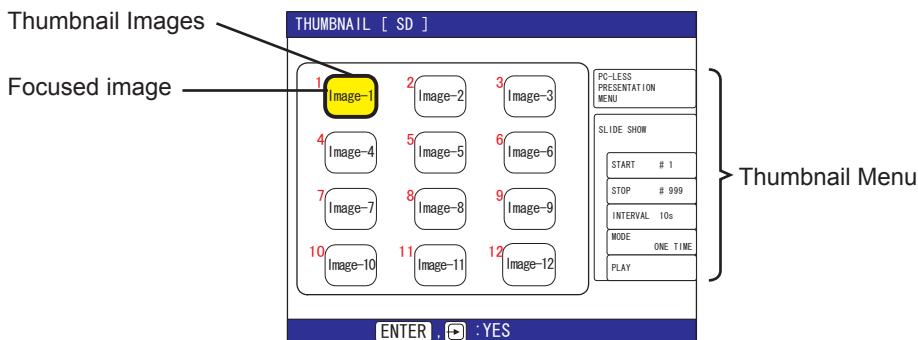


Fig. 4.2.1 Thumbnail Mode

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following operations can be accessible while thumbnail is displayed.

▲/▼/◀/▶ Remote control/Keypad	Moves cursor.
PAGE UP PAGE DOWN Remote control	Switches pages.
ENTER INPUT Keypad	Displays selected image in full screen.
MENU Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • Thumbnail Mode shows 12 pictures in 1 page as maximum.

- It is not possible to change the input port by INPUT button when THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.
- Display the projector OSD Menu before changing the input port.
- Select the right edge images and press the ▶ button, then thumbnail menu will be selected.
- Some error Icons will be displayed in thumbnail.



This file seems to be broken or not supported format.



This file exists only in Playlist (65), but does not exist anywhere.

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.2 Full Screen Mode

Full Screen Mode (Fig.4.2.2) shows a full display image. To make full screen display, press the ENTER button on remote control or the INPUT button on Keypad or click [ENTER] button in the Web Remote Control if the image file is selected on Thumbnail Mode or Directory Tree View.

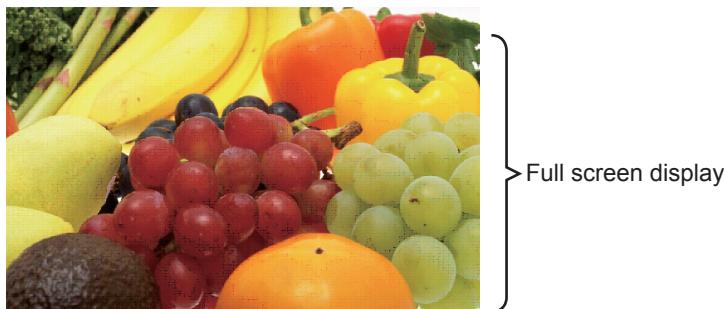


Fig.4.2.2 Full Screen Mode

While displaying in full screen, following operation can be accessible from the Web Remote Control.

◀/▶ or ▲/▼ (Selected on KEY CONFIG. MENU  58)	• Rotates image 90 degrees clockwise or otherwise. Once image is rotated, it keeps the display image even though it is switched. (Thumbnail or Slide Show Mode) To return the original, rotate the image 360 degrees or erase playlist in memory card. ( 65) • Moves the slide forward or backward.
[ENTER] Remote control [INPUT] Keypad	(from Thumbnail Mode) Displays thumbnail.
[MENU] Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • It is not possible to change the input port by INPUT button of keypad when displaying the THUMBNAIL, SLIDE SHOW, or DIRECTORY.
 • Display the projector OSD Menu before changing the input port.
 • Image might not be displayed properly at the beginning or end of MP4 file playback.

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

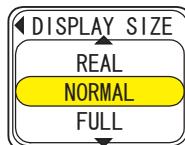
You can display the image file with your desired size.

1) Select the DISPLAY SIZE in PC-LESS PRESENTATION Menu.

2) Press the ENTER button on the remote control or ► button on the Keypad.



3) Then DISPLAY SIZE menu appears.



4) Select your desired DISPLAY SIZE.

• REAL : Displays the image at original size.

 Displays the image at the center of screen if original size is smaller than the screen size.

 Displays only center of the image if original size is larger than the screen size.

• NORMAL : Displays the image for the maximum size on the screen, and keeps original aspect.

• FULL : Displays the image at the full size screen.

 Original aspect will be changed to full size display.

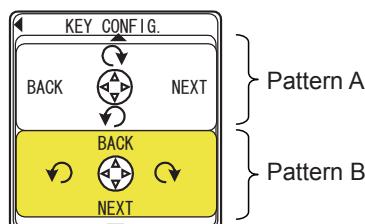
The animation file is always played at VGA mode if resolution is larger than VGA. The animation file is always played at the center of screen if resolution is smaller than VGA.

You can select the KEY configuration from 2 preset pattern assigned to ▲/▼/◀/▶ keys on Thumbnail Mode.

1) Select the KEY CONFIG. in PC-LESS PRESENTATION Menu.

2) Press ► button.

3) The KEY CONFIG. menu appears.



4) Select the KEY CONFIG. pattern.

• pattern A : ▲ : previous image

 ▲ : rotation to right

• pattern B : ▲ : rotation to left

 ▲ : previous image

► : next image

▼ : rotation to left

► : rotation to right

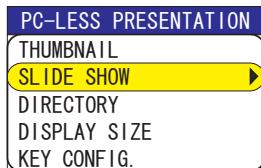
▼ : next image

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.3 Slide Show Mode

You can play the Slide show with the projector Menu. Select SLIDE SHOW on PC-LESS PRESENTATION Menu and press the ENTER / ► button on the remote control or ► button on Keypad. Then Slide show will start.

You can also play the Slide show by clicking [SLIDE SHOW] button in the Web Remote Control.



Slide Show Mode (Fig.4.2.3) displays a full screen image and switches the images at Display time. Display time can be set by the Playlist (refer to section 4.3) and menu.



Fig. 4.2.3 Slide Show Mode

Following operations can be accessible while Slide show is displayed.

ENTER	Remote control	Displays thumbnail.
INPUT	Keypad	
MENU	Remote control	Displays PC-LESS PRESENTATION Menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • It is impossible to change the input port by INPUT button if THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.

- Display the projector OSD Menu before changing the input port .
- Images can be displayed when it is recorded in the Playlist.
- Image can not be displayed in the thumbnail if it is not recorded in the Playlist. (☞65)
- The START #, STOP #, INTERVAL, and MODE are set by thumbnail menu once, this setting has higher priority than the Playlist.
- If you would like to release the priority, delete the slidemode.txt file from directory.
- When SLIDE SHOW mode is set to ONE TIME, the last slide of the presentation will be held on screen till either of ENTER button on the remote control or INPUT button on the projector is pushed.

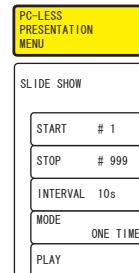
4. Utilize projector – Advanced -

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

You can play the Slide show at your desired configuration.

Configure the SLIDE SHOW items in THUMBNAIL.

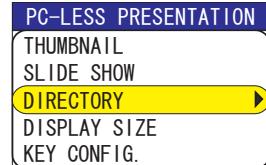
- 1) START # : Set the beginning number of Slide show.
- 2) STOP # : Set the end number of Slide show.
- 3) INTERVAL : Set the interval Slide show.
- 4) MODE : Select the Slide show mode.
 - ONE TIME : Play the Slide show one time.
 - ENDLESS : Play the Slide show endless.
- 5) PLAY : Play the Slide show. When interval setting is short like within several seconds and pictures are stored in deep layer directory like in 9th or 10th layer or stored so many pictures, it may take several seconds longer than designated interval time.



4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.4 Directory Tree View

You can display the directory with the projector Menu. Select DIRECTORY on PC-LESS PRESENTATION Menu. And press the ENTER / ► button on remote control or ► button on Keypad. Then directory will be displayed.



You can also display the directory by clicking the [DIRECTORY] button in the Web Remote Control.

Directory Tree View (Fig.4.2.4) is displayed all folders and files (includes un-supported format file) in the memory card as a tree view.

The preview image is shown on the top left corner on directory tree view. In case of movie file, an initial flame is displayed as preview. No preview is displayed if a folder or un-supported format file is selected.

If the displayable file is selected and the ENTER button on remote control is pressed, it turns into the full screen image.

If the directory is selected and the ENTER button on remote control is pressed, it turns into the thumbnail view of selected folder.

You can also display the full screen image or the thumbnail view by clicking the [ENTER] button in the Web Remote Control.



Fig. 4.2.4 Directory Tree View

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

Following operations can be accessible while directory is displayed.

▲/▼	Moves selected item upward or downward.
▶	Opens the closed folder.
◀	Closes the folder.
PAGE UP PAGE DOWN Remote control	Switches pages if the whole directory tree view cannot be displayed.
ENTER INPUT Keypad	Displays a selected file as a preview in full screen. The unsupported format file cannot be opened. If the preview is displayed and Enter button is pressed, it returns to the directory tree view. If the directory (folder) is selected, it turns into Thumbnail Mode.
MENU Remote control	Displays the menu.

* These operations are not accessible while projector OSD menu is displayed.

NOTE • It is not possible to change the input port by INPUT button when THUMBNAIL, SLIDE SHOW, or DIRECTORY is displayed.

- Display the projector OSD Menu before changing the input port .
- Only alphanumeric characters can be used for directory name and file name.
- This Directory Tree View is able to show up to 10 layers depth. The files and folders that located on more than 10th layer cannot be shown. Some files and directories are not displayed if there are too many. In this case, delete some files in the directory or some directories in the memory card.

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

[File information display]

File information display shows following information.

Picture file (still picture)

- File format (“JPEG Image”, “PNG Image” or “BMP Image”)
- Time stamp (When file is created)
- File size (Size of File)
- Image size (File resolution)

Movie file (motion picture)

- File format (“MP4 Movie”)
- Time stamp (When file is created)
- File size (Size of File)
- Movie size (File resolution)
- Movie time (Play time)

Un-supported format file

- File format (“File”)
- Time stamp (When file is created)
- File size (Size of File)

Directory

- File format (“Directory”)
- Time stamp (When directory is created)

4.2 Utilize “PC-LESS Presentation” – Advanced - (Continued)

4.2.5 “PC-LESS Presentation” error message

Error message is displayed at a specific condition while “PC-LESS Presentation” mode. It appears at the bottom and the gray area of screen.

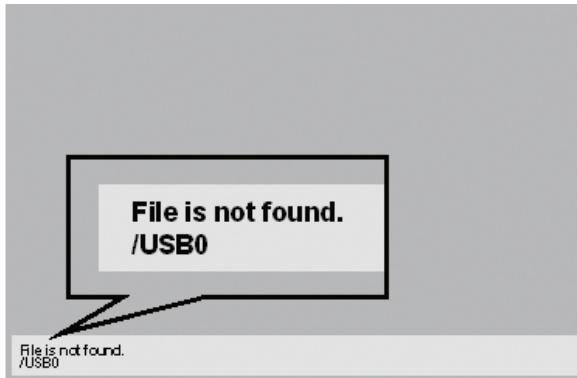


Fig. 4.2.5 “PC-LESS Presentation” error message

“PC-LESS Presentation” error message list

Error message	Error content	Display mode
File is not found.	Displayable file does not exist.	Full Screen Mode (from Thumbnail Mode) and Side Show Mode
Illegal Playlist file.	Playlist file has malfunction. (Over 64kB file, over 1022 characters per line in file or linefeed code malfunction)	Slide Show Mode

4.3 Playlist

Playlist is a DOS format text file, which decides the order of displayed still image files or moving image files in the thumbnail or the slide show.

Playlist file name is **[imagelistdir.txt]**. It is created in each folder when “PC-LESS Presentation” is displayed. The timing of playlist creation is when “PC-LESS Presentation” is displayed in the directory, which any playlist file does not exist. The playlist is created in the displayed directory.

NOTE • Playlist can not be overwritten. Once it is created, data remains. Therefore, the image can not be displayed if it is additionally saved to the memory card that is on the playlist. In order to see added picture file, delete playlist.

Playlist is editable on the PC. Display time and rotation information at the slide show can be set based on specifying settings. Of course it is possible to make certain file image undisplayable in a playlist deleting 1 line relating to the file from playlist. Also, it is possible to see added picture image based on adding picture image file name and pass name of destination to save in playlist.

[Example of adding image file] (Pass name/pass name/.../file name, display time, rotation information)

images/photo1/img001.jpg
 images/photo1/img002.jpg, 2000
 images/photo1/img003.jpg, 500, rot1
 images/photo1/img004.jpg
 images/photo1/img005.jpg, 500, rot2

The number after the extension is the slide show display time. It can be set between 0 and 999900. (ms) Least input increment is 100 ms. The end of display time means rotation information. 90 degrees clockwise rotation becomes rot1, rot2 and rot3. (When no rotation, not specify or specify rot0.)

Display time and rotation information should be used “,” for separation.

△Caution • Maximum characters for the playlist in 1 line at playlist is 1024 including linefeed. If it exceeds, playlist becomes invalid and error.
 • Playlist maximum size is 64kB. If it exceeds, it becomes invalid.
 • Playlist can register up to 999 image files. If it exceeds, first 999 files can be utilized.
 • When image file is added to the memory card and be able to see on the screen, delete existing playlist in the memory card.

4.4 E-mail Alerts

The projector can send an alert message to the specified e-mail addresses when the projector detects a certain condition that is requiring maintenance or detected an error.

NOTE • Up to five e-mail addresses can be specified.

- The projector may be not able to send e-mail if the projector suddenly loses power.

Mail Settings (BOOK 26)

To use the projector's e-mail alert function, please configure the following items through a web browser.

Example: If the IP address of the projector is set to 192.168.1.10:

- 1) Enter [<http://192.168.1.10/>] into the address bar of the web browser.
- 2) Enter the Administrator ID and Password and click [**Logon**].
- 3) Click [**Port Settings**] on the main menu.
- 4) Click the [**Enable**] check box to open the SMTP port.
- 5) Click the [**Apply**] button to save the settings.
- 6) Click [**Mail Settings**] and configure each item. Refer to the [**Mail Settings**] item in "Configuring and controlling the Projector via a Web Browser" for further information.
- 7) Click the [**Apply**] button to save the settings.

NOTE • Click the [**Send Test Mail**] button in [**Mail Settings**] to confirm that the e-mail settings are correct. The following mail will be delivered to the specified addresses.

Subject line : Test Mail <Projector name>
Text : Send Test Mail
Date <Testing date>
Time <Testing time>
IP Address <Projector IP address>
MAC Address <Projector MAC address>

4.4 E-mail Alerts (Continued)

Mail Settings (Continued)

- 8) Click **[Alert Settings]** on the main menu to configure the E-mail Alerts settings.
- 9) Select and configure each alert item. Refer to “Alert Settings” in “Configuring and controlling the Projector via a Web Browser” for further information.
- 10) Click the **[Apply]** button to save the settings.

Failure/Warning e-mails are formatted as follows:

Subject line	:	<Mail title>	<Projector name>
Text	:	<Mail text>	
Date		<Failure/Warning date>	
Time		<Failure/Warning time>	
IP Address		<Projector IP address>	
MAC Address		<Projector MAC address>	

4.5 Projector Management using SNMP

The SNMP (Simple Network Management Protocol) enables to manage the projector information, which is a failure or warning status, from the computer on the network. The SNMP management software will be required on the computer to use this function.

NOTE • It is recommended that SNMP functions be carried out by a network administrator.

- SNMP management software must be installed on the computer to monitor the projector via SNMP.

SNMP settings (25)

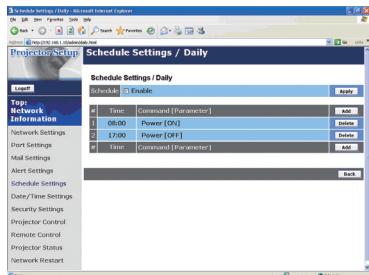
Configure the following items via a web browser to use SNMP.

Example: If the IP address of the projector is set to 192.168.1.10:

- 1) Enter [<http://192.168.1.10/>] into the address bar of the web browser.
- 2) Enter the Administrator ID and Password and click [**Logon**].
- 3) Click [**Port Settings**] on the main menu.
- 4) Click the [**Enable**] check box to open the SNMP port. Set the IP address to send the SNMP trap to when a Failure/Warning occurs.
- 5) Click [**Security Settings**] on the main menu.
- 6) Click [**SNMP**] and set the community name on the screen that is displayed.
- 7) Configure the settings for Trap transmission of Failures/Warnings. Click [**Alert Settings**] on the main menu and select the Failure/Warning item to be configured.
- 8) Click the [**Enable**] check box to send out the SNMP trap for Failures/Warnings. Clear the [**Enable**] check box when SNMP trap transmission is not required.
- 9) Click the [**Apply**] button to save the settings.

4.6 Event Scheduling

The scheduling function enables to setup scheduled events including power on / power off. It enables to be “self-management” projector.



NOTE • You can schedule the following control events: Power ON/OFF, Input Source and Transferred Image Display.

- The power on / off event has the lowest priority among the all events that are defined at the same time.
- There are 3 types of Scheduling, 1) daily 2) weekly 3) specific date. (☞70)
- The priority for scheduled events is as follows 1) specific date 2) weekly 3) daily.
- Up to five specific dates are available for scheduled events. Priority is given to those with the lower numbers when more than one event has been scheduled for the same date and time (e.g., ‘Specific day No. 1’ has priority over ‘Specific day No. 2’ and so on).
- Be sure to set the date and time before enabling scheduled events. (☞71)

4.6 Event Scheduling (Continued)

Schedule Settings (29)

Schedule settings can be configured from a web browser.

Example: If the IP address of the projector is set to 192.168.1.10:

- 1) Enter [<http://192.168.1.10/>] into the address bar of the web browser.
- 2) Enter the Administrator ID and Password and click [**Logon**].
- 3) Click [**Schedule Settings**] on the main menu and select the required schedule item. For example, if you want to perform the command every Sunday, please select the [**Sunday**].
- 4) Click the [**Enable**] check box to enable scheduling.
- 5) Enter the date (month/day) for specific date scheduling.
- 6) Click the [**Apply**] button to save the settings.
- 7) Click [**Add**] to create new event. After configure the time, command and parameters, click [**Register**] to add the new event. To return the previous page, click [**Cancel**] button.
- 8) Click the [**Delete**] button when you want to delete a schedule.

There are three types of scheduling.

- 1) Daily: Perform the specified operation at a specified time every day.
- 2) Sunday ~ Saturday: Perform the specified operation at the specified time on a specified day of the week.
- 3) Specific Date: Perform the specified operation on the specified date and time.

NOTE • In Standby mode the power indicator will flash green for approx. 3 seconds when at least 1 “Power ON” schedule is saved.

• When the schedule function is used, the projector must be plugged in and the power indicator must light in orange or green. If the projector is unplugged or the breaker in the room trips, the schedule function does not work.

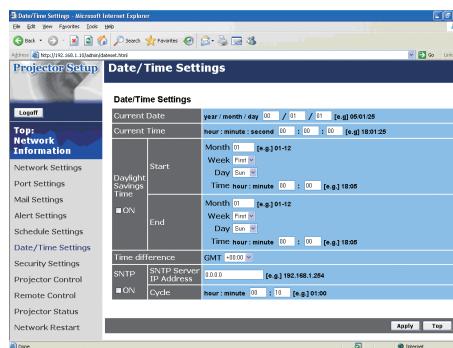
4.6 Event Scheduling (Continued)

Date/Time Settings (☞31)

The Date/Time setting can be adjusted via a web browser.

Example: If the IP address of the projector is set to 192.168.1.10/:

- 1) Enter [<http://192.168.1.10/>] into the address bar of the web browser.
Enter the Administrator ID and Password and click [**Logon**].
- 2) Click [**Date/Time Settings**] on the main menu and configure each item. Refer to the [**Date/Time Settings**] item in “Configuring and controlling the Projector via a Web Browser” for further information.
- 3) Click the [**Apply**] button to save the settings.



NOTE • The battery for the built in clock may be dead if the clock loses time even when the Date and Time have been set correctly. Replace the battery by following the instructions on replacing the battery.

(☞*Internal clock battery* of the *User's Manual - Operating Guide*)

• The Internal Clock's time may not remain accurate. Using SNTP is recommended to maintain accurate time.

4.7 e-SHOT (Still Image Transfer) Display

The projector can display a still image in an SD Memory Card or USB memory that is transferred via the network. (Fig.4.7)

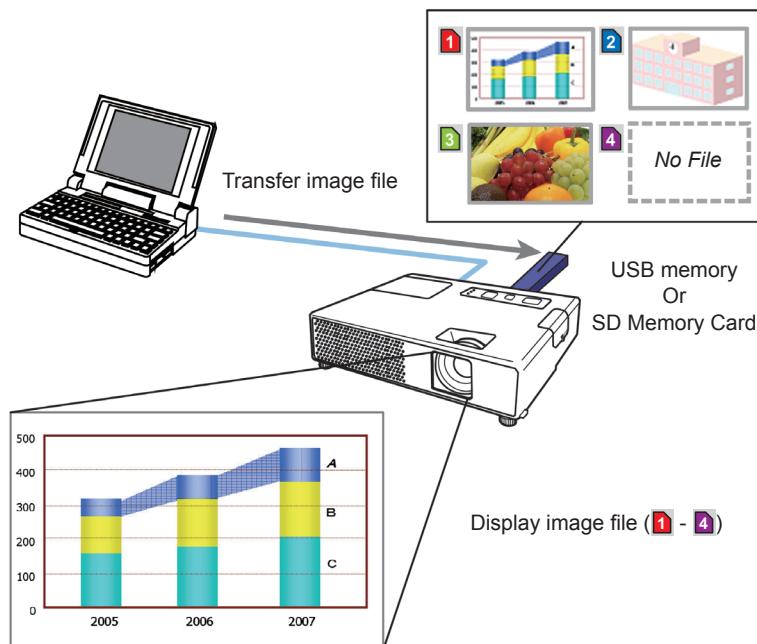


Fig.4.7 Still Image Transfer

e-SHOT transmission requires an exclusive application for your PC. You can download it from the Hitachi web site (<http://hitachi.us/digitalmedia> or <http://www.hitachidigitalmedia.com>). Refer to the manual for the application for instructions.

To display the transferred image, select the e-SHOT item in the MIU menu. For more information, please see the description of the e-SHOT item of the MIU menu. ( **MIU menu** of the *User's Manual - Operating Guide*)

NOTE • Supported file types are JPEG, Bitmap and PNG.

- It is possible to allocate the image file up to 4 in the maximum.
- The image file also can be displayed by using schedule function from the web browser. Refer to  **4.6 Event Scheduling** in detail.

4.8 Command Control via the Network

You can configure and control the projector via the network using commands.

Communication Port

The following two ports are assigned for the command control.

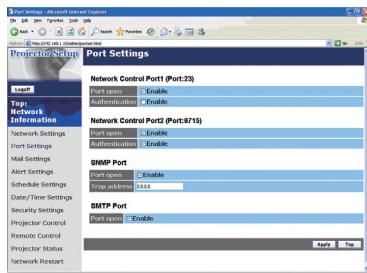
TCP #23
TCP #9715

Command Control Settings (□25)

Configure the following items from a web browser when command control is used.

Example: If the IP address of the projector is set to 192.168.1.10:

- 1) Enter [<http://192.168.1.10/>] into the address bar of the web browser.
- 2) Enter the Administrator ID and Password and click [**Logon**].
- 3) Click [**Port Settings**] on the main menu.



- 4) Click the [**Enable**] check box to open [**Network Control Port1 (Port: 23)**] to use TCP #23. Click the [**Enable**] check box for the [**Authentication**] setting when authentication is required, otherwise clear the check box.
- 5) Click the [**Enable**] check box to open [**Network Control Port2 (Port: 9715)**] to use TCP #9715. Click the [**Enable**] check box for the [**Authentication**] setting when authentication is required, otherwise clear the check box.
- 6) Click the [**Apply**] button to save the settings.

4.8 Command Control via the Network (Continued)

Command Control Settings (Continued)

When the authentication setting is enabled, the following settings are required.

(33)

- 7) Click **[Security Settings]** on the main menu.
- 8) Click **[Network Control]** and enter the desired authentication password. * See NOTE.
- 9) Click the **[Apply]** button to save the settings.

NOTE • The Authentication Password will be the same for **[Network Control Port1 (Port: 23)]**, **[Network Control Port2 (Port: 9715)]**.

Regarding the command details (format and protocol), please see the User's Manual - Technical.

5. Troubleshooting

Problem		Likely Cause	Things to Check	Reference Page Number
No image		The projector is not turned on.	Is the projector's lamp on?	*14
		The projector's input source isn't switched to MIU.	Is the projector switched to MIU?	*15
Wireless / Wired	Live Mode	The projector that you want to connect to is nowhere to be found on the list of available projectors	The PC and/or projector's network settings are not configured correctly.	Check both the PC and projector's network settings. If you change the projector's settings, turn off the projector's AC power and then turn it on again. If you simply put the projector in STANDBY power mode and then turn it on again, the new settings might not take effect. 8, 10, 16
			Weak radio signal	• Bring the PC and projector closer together • Radio waves won't go through concrete and metal (steel doors, etc.) —
	Can't communicate	The Projector isn't in Live Mode	Check the mode on MIU Menu to make sure that it is in the correct mode.	47
	The projected image is rather slow compared to that of the PC	The projector isn't capable of relaying dynamic images such as PowerPoint® animation at full speed.	Try increasing the Capture Performance priority level. It may improve the speed a little.	45
		“Optimize Performance” is set to “Image quality”.	Try setting “Optimize Performance” to “Transmission speed”.	45

(continued on next page)

* User's Manual - Operating Guide

5. Troubleshooting

Problem		Likely Cause	Things to Check	Reference Page Number
Wireless / Wired	Live Mode	Lots of interference in the images	"Optimize Performance" is set to "Transmission speed".	45
		Two cursors appear	Cursor of the PC and cursor of the projector are displayed coming in succession.	45
		No cursor appears	Some PCs do not display the cursor in MIU Live Viewer.	45
PC-LESS		No information is shown after mass storage device is set on Thumbnail or Directory mode.	The mode setting is not renewed after the device is set.	50, 61
Wireless		Can't communicate	The wireless network card isn't inserted into the projector or the memory card is still inserted.	*10
			There is closely another projector or other that has the same wireless setting.	24 *50
Wired LAN		Can't communicate	The PC and/or projector's network settings are not configured correctly.	11-13
			The wireless network card is inserted into the projector.	*54
Others - Information from the projector to PC is not correct or completed - The projector does not respond - Image on screen is freezed		Communication between the projector and PC is not working well. MIU Functions of the projector is not working well.	Try "MIU RESTART" in MIU SERVICE MENU.	*54

* User's Manual - Operating Guide

6. Specifications

Item	Specifications
File format	JPEG: Progressive is not corresponded. Bitmap: 16bit mode and compressed bitmap is not corresponded. PNG: Interlace PNG is not corresponded. MPEG4: Supported bit resolution rate is less than 1Mbps in Simple Profile. Supported resolution is less than VGA. Supported Audio format is only AAC.
Control software	Dedicated PC application and Web browser
Corresponding protocol	TCP/IP, DHCP client and HTTP server
Network	Wireless LAN (IEEE802.11b/g) (Ad-Hoc and Infrastructure modes) Ethernet (100Base-TX/10Base-T)
Security	WEP(64/128bit), WPA-PSK/PSK2(TKIP/AES), SSID
PC application operational environment	OS: Windows® XP Home Edition/ Professional Windows® 2000 Professional Service Pack 4 CPU: Pentium III 600MHz or more is recommended. Memory size: 64MB or more, 128MB or more in case of XP Graphic I/F: DirectX 6.1a or later Video RAM: 4MB required (8MB recommended) HDD: 10MB CD-ROM drive Web browser: Internet Explorer 5.5 or later
SD Memory Card	SD Memory Card (Corresponding card is not confirmed yet.)
Wireless network card	C-guys SD-Link11g
USB	USB1.0 host mass storage class SBC/BOT type Following USB memories can be read/written. - USB memory type - Card reader type (Corresponding card is not confirmed yet.)

7. Warranty and After-sales service

If a problem occurs with the equipment, please read “5. Troubleshooting” (book 75) section first and review all suggested check points. After that, please contact your dealer or service company, if you still have the problem. They will tell you what warranty condition is applied.

Projector

CPX2/CPX6

User's Manual (detailed)

Technical

Example of PC signal

Resolution (H x V)	H. frequency (kHz)	V. frequency (Hz)	Rating	Signal mode
720 x 400	37.9	85.0	VESA	TEXT
640 x 480	31.5	59.9	VESA	VGA (60Hz)
640 x 480	37.9	72.8	VESA	VGA (72Hz)
640 x 480	37.5	75.0	VESA	VGA (75Hz)
640 x 480	43.3	85.0	VESA	VGA (85Hz)
800 x 600	35.2	56.3	VESA	SVGA (56Hz)
800 x 600	37.9	60.3	VESA	SVGA (60Hz)
800 x 600	48.1	72.2	VESA	SVGA (72Hz)
800 x 600	46.9	75.0	VESA	SVGA (75Hz)
800 x 600	53.7	85.1	VESA	SVGA (85Hz)
832 x 624	49.7	74.5		Mac 16" mode
1024 x 768	48.4	60.0	VESA	XGA (60Hz)
1024 x 768	56.5	70.1	VESA	XGA (70Hz)
1024 x 768	60.0	75.0	VESA	XGA (75Hz)
1024 x 768	68.7	85.0	VESA	XGA (85Hz)
1152 x 864	67.5	75.0	VESA	1152 x 864 (75Hz)
1280 x 960	60.0	60.0	VESA	1280 x 960 (60Hz)
1280 x 1024	64.0	60.0	VESA	SXGA (60Hz)
1280 x 1024	80.0	75.0	VESA	SXGA (75Hz)
1280 x 1024	91.1	85.0	VESA	SXGA (85Hz)
1600 x 1200	75.0	60.0	VESA	UXGA (60Hz)
1280 x 768	47.7	60.0	VESA	W-XGA (60Hz)
1400 x 1050	65.2	60.0	VESA	SXGA+ (60Hz)

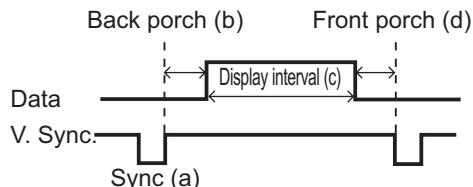
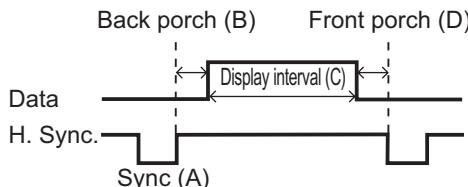
NOTE • Be sure to check jack type, signal level, timing and resolution before connecting this projector to a PC.

- Some PCs may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
- Depending on the input signal, full-size display may not be possible in some cases. Refer to the number of display pixels above.
- Although the projector can display signals with resolution up to UXGA (1600x1200), the signal will be converted to the projector's panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and projector panel are identical.
- Automatically adjustment may not function correctly with some input signals.
- The image may not be displayed correctly when the input sync signal is a composite sync or a sync on G.

Initial set signals

Initial set signals

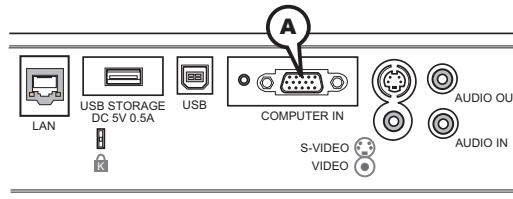
The following signals are used for the initial settings. The signal timing of some PC models may be different. In such case, adjust the items V POSITION and H POSITION in the IMAGE menu.



PC/Signal	Horizontal signal timing (μs)			
	(A)	(B)	(C)	(D)
TEXT	2.0	3.0	20.3	1.0
VGA (60Hz)	3.8	1.9	25.4	0.6
VGA (72Hz)	1.3	4.1	20.3	0.8
VGA (75Hz)	2.0	3.8	20.3	0.5
VGA (85Hz)	1.6	2.2	17.8	1.6
SVGA (56Hz)	2.0	3.6	22.2	0.7
SVGA (60Hz)	3.2	2.2	20.0	1.0
SVGA (72Hz)	2.4	1.3	16.0	1.1
SVGA (75Hz)	1.6	3.2	16.2	0.3
SVGA (85Hz)	1.1	2.7	14.2	0.6
Mac 16" mode	1.1	3.9	14.5	0.6
XGA (60Hz)	2.1	2.5	15.8	0.4
XGA (70Hz)	1.8	1.9	13.7	0.3
XGA (75Hz)	1.2	2.2	13.0	0.2
XGA (85Hz)	1.0	2.2	10.8	0.5
1152 x 864 (75Hz)	1.2	2.4	10.7	0.6
1280 x 960 (60Hz)	1.0	2.9	11.9	0.9
SXGA (60Hz)	1.0	2.3	11.9	0.4
SXGA (75Hz)	1.1	1.8	9.5	0.1
SXGA (85Hz)	1.0	1.4	8.1	0.4
UXGA (60Hz)	1.2	1.9	9.9	0.4
W-XGA (60Hz)	1.7	2.5	16.0	0.8
SXGA+ (60Hz)	1.2	2.0	11.4	0.7

PC/Signal	Vertical signal timing (lines)			
	(a)	(b)	(c)	(d)
TEXT	3	42	400	1
VGA (60Hz)	2	33	480	10
VGA (72Hz)	3	28	480	9
VGA (75Hz)	3	16	480	1
VGA (85Hz)	3	25	480	1
SVGA (56Hz)	2	22	600	1
SVGA (60Hz)	4	23	600	1
SVGA (72Hz)	6	23	600	37
SVGA (75Hz)	3	21	600	1
SVGA (85Hz)	3	27	600	1
Mac 16" mode	3	39	624	1
XGA (60Hz)	6	29	768	3
XGA (70Hz)	6	29	768	3
XGA (75Hz)	3	28	768	1
XGA (85Hz)	3	36	768	1
1152 x 864 (75Hz)	3	32	864	1
1280 x 960 (60Hz)	3	36	960	1
SXGA(60Hz)	3	38	1024	1
SXGA (75Hz)	3	38	1024	1
SXGA (85Hz)	3	44	1024	1
UXGA (60Hz)	3	46	1200	1
W-XGA (60Hz)	3	23	768	1
SXGA+ (60Hz)	3	33	1050	1

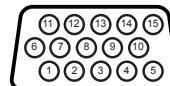
Connection to the ports

**A) COMPUTER IN**

D-sub 15pin mini shrink jack

(1) for Computer signal

- Video signal: RGB separate, Analog, $0.7V_{p-p}$, 75Ω terminated (positive)
- H/V. sync. Signal: TTL level (positive/negative)
- Composite sync. Signal: TTL level



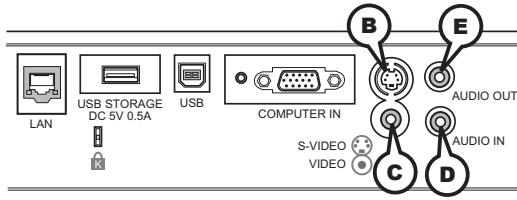
Pin	Signal	Pin	Signal
1	Video Red	10	Ground
2	Video Green	11	(No connection)
3	Video Blue	12	(A): SDA (DDC data) (B): (No connection)
4	(No connection)	13	H. sync / Composite sync.
5	Ground	14	V. sync.
6	Ground Red	15	(A): SCL (DDC clock) (B): (No connection)
7	Ground Green		
8	Ground Blue		
9	(No connection)	-	-

(2) for Component signal

- Y : Component video Y, $1.0\pm0.1 V_{p-p}$, 75Ω terminator with composite
- CR/PR : Component video CR/PR, $0.7\pm0.1 V_{p-p}$, 75Ω terminator
- CB/PB : Component video CB/PB, $0.7\pm0.1 V_{p-p}$, 75Ω terminator

Pin	Signal	Pin	Signal
1	CR/PR	10	Ground
2	Y	11	(No connection)
3	CB/PB	12	(No connection)
4	(No connection)	13	(No connection)
5	Ground	14	(No connection)
6	Ground CR/PR	15	(No connection)
7	Ground Y	-	-
8	Ground CB/PB	-	-
9	(No connection)	-	-

Connection to the ports (continued)



Ⓐ S-VIDEO

Mini DIN 4pin jack



Pin	Signal
1	Color signal 0.286Vp-p (NTSC, burst), 75Ω terminator Color signal 0.300Vp-p (PAL/SECAM, burst) 75Ω terminator
2	Brightness signal, 1.0Vp-p, 75Ω terminator
3	Ground
4	Ground

Ⓑ VIDEO

RCA jack

- System: NTSC, PAL, SECAM, PAL-M, PAL-N, NTSC4.43
- $1.0 \pm 0.1 \text{Vp-p}$, 75Ω terminator

Ⓓ AUDIO IN

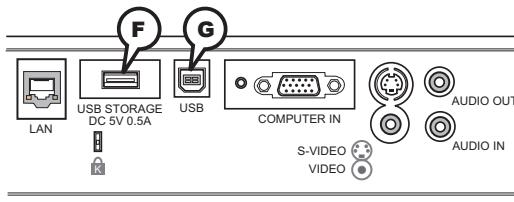
Ø3.5 stereo mini jack

- 200 mVrms 47kΩ terminator

Ⓔ AUDIO OUT

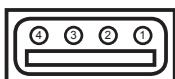
Ø3.5 stereo mini jack

- 200 mVrms 1kΩ output impedance



⑤USB STORAGE

USB A type jack



Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Ground

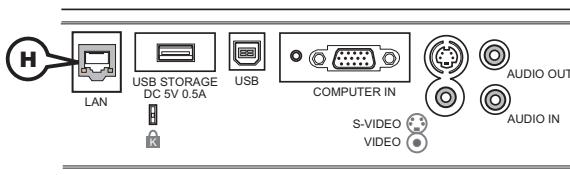
⑥USB

USB B type jack

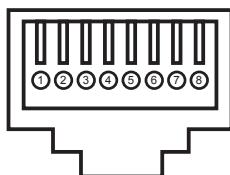


Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Ground

Connection to the ports (continued)



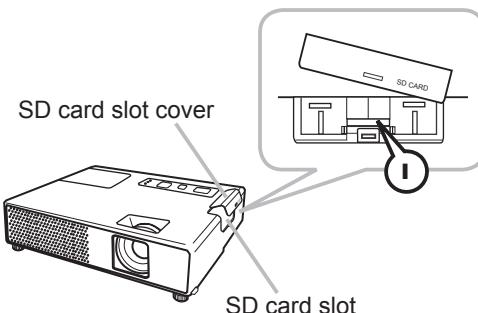
⑩ LAN
RJ-45 jack



Pin	Signal	Pin	Signal	Pin	Signal
1	TX +	4	-	7	-
2	TX -	5	-	8	CTS-
3	RX +	6	RX -	-	-

⑪ SD card slot

The SD card slot is in the side opposite to the lamp cover of the projector.



SD card slot



Pin	Signal	Pin	Signal	Pin	Signal
1	CD/DAT 3	4	VDD	7	DAT 0
2	CMD	5	CLK	8	DAT 1
3	VSS	6	VSS	9	DAT 2

Command Control via the Network

Communication Port

The following two ports are assigned for the command control.

TCP #23

TCP #9715

Command Control Settings

Configure the following items from a web browser when command control is used.

Port Settings		
Netowrk Control Port1 (Port: 23)	Port open	Click the [Enable] check box to open [Network Control Port1 (Port: 23)] to use TCP #23. Default setting is “Enable”.
	Authentication	Click the [Enable] check box for the [Authentication] setting when authentication is required. Default setting is “Disable”.
Network Control Port2 (Port: 9715)	Port open	Click the [Enable] check box to open [Network Control Port2 (Port: 9715)] to use TCP #9715. Default setting is “Enable”.
	Authentication	Click the [Enable] check box for the [Authentication] setting when authentication is required. Default setting is “Enable”.

When the authentication setting is enabled, the following settings are required.

Security Settings		
Network Control	Authentication Password	Enter the desired authentication password. This setting will be the same for [Network Control Port1 (Port: 23)] and [Network Control Port2 (Port: 9715)] . Default setting is blank.
	Re-enter Authentication Password	

Command Format

[TCP #23]

1. Protocol

Consist of header (7 bytes) + command data (6 bytes)

2. Header

BE + EF + 03 + 06 + 00 + CRC_low + CRC_high

CRC_low: Lower byte of CRC flag for command data

CRC_high: Upper byte of CRC flag for command data

3. Command data

Command data chart

byte_0	byte_1	byte_2	byte_3	byte_4	byte_5
Action		Type		Setting code	
low	high	low	high	low	high

Action (byte_0 - 1)

Action	Classification	Content
1	Set	Change setting to desired value.
2	Get	Read projector internal setup value.
4	Increment	Increment setup value by 1.
5	Decrement	Decrement setup value by 1.
6	Execute	Run a command.

Requesting projector status (Get command)

(1) Send the following request code from the PC to the projector.

Header + Command data ('02H' + '00H' + type (2 bytes) + '00H' + '00H')

(2) The projector returns the response code '1DH' + *data* (2 bytes) to the PC.

Changing the projector settings (Set command)

(1) Send the following setting code from the PC to the projector.

Header + Command data ('01H' + '00H' + type (2 bytes) + setting code (2 bytes))

(2) The projector changes the setting based on the above setting code.

(3) The projector returns the response code '06H' to the PC.

Using the projector default settings (Reset Command)

(1) The PC sends the following default setting code to the projector.

Header + Command data ('06H' + '00H' + type (2 bytes) + '00H' + '00H')

(2) The projector changes the specified setting to the default value.

(3) The projector returns the response code '06H' to the PC.

Increasing the projector setting value (Increment command)

(1) The PC sends the following increment code to the projector.

Header + Command data ('04H' + '00H' + type (2 bytes) + '00H' + '00H')

(2) The projector increases the setting value on the above setting code.

(3) The projector returns the response code '06H' to the PC.

Decreasing the projector setting value (Decrement command)

(1) The PC sends the following decrement code to the projector.

Header + Command data ('05H' + '00H' + type (2 bytes) + '00H' + '00H')

(2) The projector decreases the setting value on the above setting code.

(3) The projector returns the response code '06H' to the PC.

When the projector cannot understand the received command

When the projector cannot understand the received command, the error code '15H' is sent back to the PC.

Sometimes the projector cannot properly receive the command. In such a case, the command is not executed and the error code '15H' is sent back to the PC. If this error code is returned, send the same command again.

When the projector cannot execute the received command.

When the projector cannot execute the received command, the error code '1CH' + 'xxxxH' is sent back to the PC.

When the data length is greater than indicated by the data length code, the projector ignore the excess data code. Conversely when the data length is shorter than indicated by the data length code, an error code will be returned to the PC.

When authentication error occurred.

When authentication error occurred, the error code the '1FH' + '0400H' is sent back to the PC.

NOTE • Operation cannot be guaranteed when the projector receives an undefined command or data.

- Provide an interval of at least 40ms between the response code and any other code.
- Commands are not accepted during warm-up.

[TCP #9715]

1. Protocol

Consist of header (1 byte) + data length (1 byte) + command data (13 bytes) + check sum (1 bytes) + connection ID (1 byte).

2. Header

02, Fixed

3. Data Length

Network control commands byte length (0D, Fixed)

4. Command data

Network control commands that start with BE EF (13bytes).

5. Check Sum

This is the value to make zero on the addition of the lower 8 bits from the header to the checksum.

6. Connection ID

Random value from 0 to 255 (This value is attached to the reply data).

7. Reply Data

The connection ID (the data is same as the connection ID data on the sending data format) is attached to the Network control commands reply data.

ACK reply: '06H' + 'xxH'

NAK reply: '15H' + 'xxH'

Error reply: '1CH' + 'xxxxH' + 'xxH'

Data reply: '1DH' + 'xxxxH' + 'xxH'

Projector busy reply: '1FH' + 'xxxxH' + 'xxH'

Authentication error reply: '1FH' + '0400H' + 'xxH'

('xxH': connection ID)

Automatic Connection Break

The TCP connection will be automatically disconnected after there is no communication for 30 seconds after being established.

Authentication

The projector does not accept commands without authentication success when authentication is enabled. The projector uses a challenge response type authentication with an MD5 (Message Digest 5) algorithm. When the projector is using a LAN, a random 8 bytes will be returned if authentication is enabled. Bind this received 8 bytes and the authentication password and digest this data with the MD5 algorithm and add this in front of the commands to send.

Following is a sample if the authentication password is set to "password" and the random 8 bytes are "a572f60c".

- 1) Select the projector.
- 2) Receive the random 8 bytes "a572f60c" from the projector.
- 3) Bind the random 8 bytes "a572f60c" and the authentication password "password" and it becomes "a572f60cpassword".
- 4) Digest this bind "a572f60cpassword" with MD5 algorithm.
It will be "e3d97429adffa11bce1f7275813d4bde".
- 5) Add this "e3d97429adffa11bce1f7275813d4bde" in front of the commands and send the data.
Send "e3d97429adffa11bce1f7275813d4bde"+command.
- 6) When the sending data is correct, the command will be performed and the reply data will be returned. Otherwise, an authentication error will be returned.

NOTE • As for the transmission of the second or subsequent commands, the authentication data can be omitted when the same connection.

Command Control via the Network (continued)

Network command table

Names	Operation Type	Header				Command Data			
						CRC	Action	Type	Setting Code
Power	Set	Turn off	BE EF	03	06 00	2A D3	01 00	00 60	00 00
		Turn on	BE EF	03	06 00	BA D2	01 00	00 60	01 00
	Get	Get	BE EF	03	06 00	19 D3	02 00	00 60	00 00
		[Example return]				01 00	02 00		
Input Source	Set	COMPUTER	BE EF	03	06 00	FE D2	01 00	00 20	00 00
		VIDEO	BE EF	03	06 00	6E D3	01 00	00 20	01 00
		S-VIDEO	BE EF	03	06 00	9E D3	01 00	00 20	02 00
		MIU	BE EF	03	06 00	5E D1	01 00	00 20	06 00
	Get	Get	BE EF	03	06 00	CD D2	02 00	00 20	00 00
Error Status	Get	Get	BE EF	03	06 00	D9 D8	02 00	20 60	00 00
		[Example return]				01 00	02 00	03 00	
		00 00	[Normal]	04 00	05 00	[Cover error]	[Fan error]	[Lamp error]	
		08 00	[Temp error]	08 00	06 00	07 00	[Air flow error]	[Lamp time error]	[Cold error]
BRIGHTNESS	Get	Get	BE EF	03	06 00	89 D2	02 00	03 20	00 00
	Increment	Get	BE EF	03	06 00	EF D2	04 00	03 20	00 00
	Decrement	Get	BE EF	03	06 00	3E D3	05 00	03 20	00 00
BRIGHTNESS Reset	Execute	Get	BE EF	03	06 00	58 D3	06 00	00 70	00 00
CONTRAST	Get	Get	BE EF	03	06 00	FD D3	02 00	04 20	00 00
	Increment	Get	BE EF	03	06 00	9B D3	04 00	04 20	00 00
	Decrement	Get	BE EF	03	06 00	4A D2	05 00	04 20	00 00
CONTRAST Reset	Execute	Get	BE EF	03	06 00	A4 D2	06 00	01 70	00 00
PICTURE MODE	Set	NORMAL	BE EF	03	06 00	23 F6	01 00	BA 30	00 00
		CINEMA	BE EF	03	06 00	B3 F7	01 00	BA 30	01 00
		DYNAMIC	BE EF	03	06 00	E3 F4	01 00	BA 30	04 00
		BOARD(BLACK)	BE EF	03	06 00	E3 EF	01 00	BA 30	20 00
		BOARD(GREEN)	BE EF	03	06 00	73 EE	01 00	BA 30	21 00
		WHITEBOARD	BE EF	03	06 00	83 EE	01 00	BA 30	22 00
	Get	Get	BE EF	03	06 00	10 F6	02 00	BA 30	00 00
		[Example return]				00 00	01 00	04 00	10 00
GAMMA	Set	#1 DEFAULT	BE EF	03	06 00	07 E9	01 00	A1 30	20 00
		#1 CUSTOM	BE EF	03	06 00	07 FD	01 00	A1 30	10 00
		#2 DEFAULT	BE EF	03	06 00	97 E8	01 00	A1 30	21 00
		#2 CUSTOM	BE EF	03	06 00	97 FC	01 00	A1 30	11 00
		#3 DEFAULT	BE EF	03	06 00	67 E8	01 00	A1 30	22 00
		#3 CUSTOM	BE EF	03	06 00	67 FC	01 00	A1 30	12 00
		#4 DEFAULT	BE EF	03	06 00	F7 E9	01 00	A1 30	23 00
		#4 CUSTOM	BE EF	03	06 00	F7 FD	01 00	A1 30	13 00
		#5 DEFAULT	BE EF	03	06 00	C7 EB	01 00	A1 30	24 00
		#5 CUSTOM	BE EF	03	06 00	C7 FF	01 00	A1 30	14 00
	Get	Get	BE EF	03	06 00	F4 F0	02 00	A1 30	00 00

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Command Control via the Network (continued)

Network command table (continued)

Names	Operation Type	Header				Command Data			
		CRC	Action	Type	Setting Code				
User Gamma Pattern	Set	Off	BE EF	03	06 00	FB FA	01 00	80 30	00 00
		9 step gray scale	BE EF	03	06 00	6B FB	01 00	80 30	01 00
		15 steps gray scale	BE EF	03	06 00	9B FB	01 00	80 30	02 00
		Ramp	BE EF	03	06 00	0B FA	01 00	80 30	03 00
	Get	BE EF	03	06 00	C8 FA	02 00	80 30	00 00	
User Gamma Point 1	Get	BE EF	03	06 00	08 FE	02 00	90 30	00 00	
	Increment	BE EF	03	06 00	6E FE	04 00	90 30	00 00	
	Decrement	BE EF	03	06 00	BF FF	05 00	90 30	00 00	
User Gamma Point 2	Get	BE EF	03	06 00	F4 FF	02 00	91 30	00 00	
	Increment	BE EF	03	06 00	92 FF	04 00	91 30	00 00	
	Decrement	BE EF	03	06 00	43 FE	05 00	91 30	00 00	
User Gamma Point 3	Get	BE EF	03	06 00	B0 FF	02 00	92 30	00 00	
	Increment	BE EF	03	06 00	D6 FF	04 00	92 30	00 00	
	Decrement	BE EF	03	06 00	07 FE	05 00	92 30	00 00	
User Gamma Point 4	Get	BE EF	03	06 00	4C FE	02 00	93 30	00 00	
	Increment	BE EF	03	06 00	2A FE	04 00	93 30	00 00	
	Decrement	BE EF	03	06 00	FB FF	05 00	93 30	00 00	
User Gamma Point 5	Get	BE EF	03	06 00	38 FF	02 00	94 30	00 00	
	Increment	BE EF	03	06 00	5E FF	04 00	94 30	00 00	
	Decrement	BE EF	03	06 00	8F FE	05 00	94 30	00 00	
User Gamma Point 6	Get	BE EF	03	06 00	C4 FE	02 00	95 30	00 00	
	Increment	BE EF	03	06 00	A2 FE	04 00	95 30	00 00	
	Decrement	BE EF	03	06 00	73 FF	05 00	95 30	00 00	
User Gamma Point 7	Get	BE EF	03	06 00	80 FE	02 00	96 30	00 00	
	Increment	BE EF	03	06 00	E6 FE	04 00	96 30	00 00	
	Decrement	BE EF	03	06 00	37 FF	05 00	96 30	00 00	
User Gamma Point 8	Get	BE EF	03	06 00	7C FF	02 00	97 30	00 00	
	Increment	BE EF	03	06 00	1A FF	04 00	97 30	00 00	
	Decrement	BE EF	03	06 00	CB FE	05 00	97 30	00 00	
COLOR TEMP	Set	HIGH	BE EF	03	06 00	0B F5	01 00	B0 30	03 00
		MID	BE EF	03	06 00	9B F4	01 00	B0 30	02 00
		LOW	BE EF	03	06 00	6B F4	01 00	B0 30	01 00
		Hi-BRIGHT-1	BE EF	03	06 00	3B F2	01 00	B0 30	08 00
		Hi-BRIGHT-2	BE EF	03	06 00	AB F3	01 00	B0 30	09 00
		CUSTOM-1	BE EF	03	06 00	CB F8	01 00	B0 30	13 00
		CUSTOM-2	BE EF	03	06 00	5B F9	01 00	B0 30	12 00
		CUSTOM-3	BE EF	03	06 00	AB F9	01 00	B0 30	11 00
		CUSTOM-4	BE EF	03	06 00	FB FF	01 00	B0 30	18 00
		CUSTOM-5	BE EF	03	06 00	6B FE	01 00	B0 30	19 00
	Get	BE EF	03	06 00	C8 F5	02 00	B0 30	00 00	
COLOR TEMP GAIN R	Get	BE EF	03	06 00	34 F4	02 00	B1 30	00 00	
	Increment	BE EF	03	06 00	52 F4	04 00	B1 30	00 00	
	Decrement	BE EF	03	06 00	83 F5	05 00	B1 30	00 00	
COLOR TEMP GAIN G	Get	BE EF	03	06 00	70 F4	02 00	B2 30	00 00	
	Increment	BE EF	03	06 00	16 F4	04 00	B2 30	00 00	
	Decrement	BE EF	03	06 00	C7 F5	05 00	B2 30	00 00	

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Command Control via the Network (continued)

Network command table (continued)

Names	Operation Type	Header				Command Data			
		CRC	Action	Type	Setting Code				
COLOR TEMP GAIN B	Get	BE EF	03	06 00	8C F5	02 00	B3 30	00 00	
	Increment	BE EF	03	06 00	EA F5	04 00	B3 30	00 00	
	Decrement	BE EF	03	06 00	3B F4	05 00	B3 30	00 00	
COLOR TEMP OFFSET R	Get	BE EF	03	06 00	04 F5	02 00	B5 30	00 00	
	Increment	BE EF	03	06 00	62 F5	04 00	B5 30	00 00	
	Decrement	BE EF	03	06 00	B3 F4	05 00	B5 30	00 00	
COLOR TEMP OFFSET G	Get	BE EF	03	06 00	40 F5	02 00	B6 30	00 00	
	Increment	BE EF	03	06 00	26 F5	04 00	B6 30	00 00	
	Decrement	BE EF	03	06 00	F7 F4	05 00	B6 30	00 00	
COLOR TEMP OFFSET B	Get	BE EF	03	06 00	BC F4	02 00	B7 30	00 00	
	Increment	BE EF	03	06 00	DA F4	04 00	B7 30	00 00	
	Decrement	BE EF	03	06 00	0B F5	05 00	B7 30	00 00	
COLOR	Get	BE EF	03	06 00	B5 72	02 00	02 22	00 00	
	Increment	BE EF	03	06 00	D3 72	04 00	02 22	00 00	
	Decrement	BE EF	03	06 00	02 73	05 00	02 22	00 00	
COLOR Reset	Execute	BE EF	03	06 00	80 D0	06 00	0A 70	00 00	
TINT	Get	BE EF	03	06 00	49 73	02 00	03 22	00 00	
	Increment	BE EF	03	06 00	2F 73	04 00	03 22	00 00	
	Decrement	BE EF	03	06 00	FE 72	05 00	03 22	00 00	
TINT Reset	Execute	BE EF	03	06 00	7C D1	06 00	0B 70	00 00	
SHARPNESS	Get	BE EF	03	06 00	F1 72	02 00	01 22	00 00	
	Increment	BE EF	03	06 00	97 72	04 00	01 22	00 00	
	Decrement	BE EF	03	06 00	46 73	05 00	01 22	00 00	
SHARPNESS Reset	Execute	BE EF	03	06 00	C4 D0	06 00	09 70	00 00	
MY MEMORY Load	Set	1	BE EF	03	06 00	0E D7	01 00	14 20	00 00
		2	BE EF	03	06 00	9E D6	01 00	14 20	01 00
		3	BE EF	03	06 00	6E D6	01 00	14 20	02 00
		4	BE EF	03	06 00	FE D7	01 00	14 20	03 00
MY MEMORY Save	Set	1	BE EF	03	06 00	F2 D6	01 00	15 20	00 00
		2	BE EF	03	06 00	62 D7	01 00	15 20	01 00
		3	BE EF	03	06 00	92 D7	01 00	15 20	02 00
		4	BE EF	03	06 00	02 D6	01 00	15 20	03 00
PROGRESSIVE	Set	TURN OFF	BE EF	03	06 00	4A 72	01 00	07 22	00 00
		TV	BE EF	03	06 00	DA 73	01 00	07 22	01 00
		FILM	BE EF	03	06 00	2A 73	01 00	07 22	02 00
		Get	BE EF	03	06 00	79 72	02 00	07 22	00 00
VIDEO NR	Set	LOW	BE EF	03	06 00	26 72	01 00	06 22	01 00
		MID	BE EF	03	06 00	D6 72	01 00	06 22	02 00
		HIGH	BE EF	03	06 00	46 73	01 00	06 22	03 00
		Get	BE EF	03	06 00	85 73	02 00	06 22	00 00
ASPECT	Set	4:3	BE EF	03	06 00	9E D0	01 00	08 20	00 00
		16:9	BE EF	03	06 00	0E D1	01 00	08 20	01 00
		14:9	BE EF	03	06 00	CE D6	01 00	08 20	09 00
		SMALL	BE EF	03	06 00	FE D1	01 00	08 20	02 00
		NORMAL	BE EF	03	06 00	5E DD	01 00	08 20	10 00
		Get	BE EF	03	06 00	AD D0	02 00	08 20	00 00

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Command Control via the Network (continued)

Network command table (continued)

Names	Operation Type	Header				Command Data			
		CRC	Action	Type	Setting Code				
OVER SCAN	Get	BE EF	03	06 00	91 70	02 00	09 22	00 00	
	Increment	BE EF	03	06 00	F7 70	04 00	09 22	00 00	
	Decrement	BE EF	03	06 00	26 71	05 00	09 22	00 00	
OVER SCAN Reset	Execute	BE EF	03	06 00	EC D9	06 00	27 70	00 00	
V POSITION	Get	BE EF	03	06 00	0D 83	02 00	00 21	00 00	
	Increment	BE EF	03	06 00	6B 83	04 00	00 21	00 00	
	Decrement	BE EF	03	06 00	BA 82	05 00	00 21	00 00	
V POSITION Reset	Execute	BE EF	03	06 00	E0 D2	06 00	02 70	00 00	
H POSITION	Get	BE EF	03	06 00	F1 82	02 00	01 21	00 00	
	Increment	BE EF	03	06 00	97 82	04 00	01 21	00 00	
	Decrement	BE EF	03	06 00	46 83	05 00	01 21	00 00	
H POSITION Reset	Execute	BE EF	03	06 00	1C D3	06 00	03 70	00 00	
H PHASE	Get	BE EF	03	06 00	49 83	02 00	03 21	00 00	
	Increment	BE EF	03	06 00	2F 83	04 00	03 21	00 00	
	Decrement	BE EF	03	06 00	FE 82	05 00	03 21	00 00	
H SIZE	Get	BE EF	03	06 00	B5 82	02 00	02 21	00 00	
	Increment	BE EF	03	06 00	D3 82	04 00	02 21	00 00	
	Decrement	BE EF	03	06 00	02 83	05 00	02 21	00 00	
H SIZE Reset	Execute	BE EF	03	06 00	68 D2	06 00	04 70	00 00	
AUTO ADJUST	Execute	BE EF	03	06 00	91 D0	06 00	0A 20	00 00	
COLOR SPACE	Set	AUTO	BE EF	03	06 00	0E 72	01 00	04 22	00 00
		RGB	BE EF	03	06 00	9E 73	01 00	04 22	01 00
		SMPTE240	BE EF	03	06 00	6E 73	01 00	04 22	02 00
		REC709	BE EF	03	06 00	FE 72	01 00	04 22	03 00
		REC601	BE EF	03	06 00	CE 70	01 00	04 22	04 00
	Get	BE EF	03	06 00	3D 72	02 00	04 22	00 00	
C-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	A2 70	01 00	11 22	0A 00
		NTSC	BE EF	03	06 00	C2 74	01 00	11 22	04 00
		PAL	BE EF	03	06 00	52 75	01 00	11 22	05 00
		SECAM	BE EF	03	06 00	52 70	01 00	11 22	09 00
		NTSC4.43	BE EF	03	06 00	62 77	01 00	11 22	02 00
		M-PAL	BE EF	03	06 00	C2 71	01 00	11 22	08 00
		N-PAL	BE EF	03	06 00	32 74	01 00	11 22	07 00
	Get	BE EF	03	06 00	31 76	02 00	11 22	00 00	
S-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	E6 70	01 00	12 22	0A 00
		NTSC	BE EF	03	06 00	86 74	01 00	12 22	04 00
		PAL	BE EF	03	06 00	16 75	01 00	12 22	05 00
		SECAM	BE EF	03	06 00	16 70	01 00	12 22	09 00
		NTSC4.43	BE EF	03	06 00	26 77	01 00	12 22	02 00
		M-PAL	BE EF	03	06 00	86 71	01 00	12 22	08 00
		N-PAL	BE EF	03	06 00	76 74	01 00	12 22	07 00
	Get	BE EF	03	06 00	75 76	02 00	12 22	00 00	
COMPUTER IN	Set	SYNC ON G OFF	BE EF	03	06 00	5E D7	01 00	10 20	02 00
		AUTO	BE EF	03	06 00	CE D6	01 00	10 20	03 00
	Get	BE EF	03	06 00	0D D6	02 00	10 20	00 00	

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Command Control via the Network (continued)

Network command table (continued)

Names	Operation Type	Header				Command Data			
		CRC	Action	Type	Setting Code				
FRAME LOCK	Set	TURN OFF	BE EF	03	06 00	CB D6	01 00	14 30	00 00
		TURN ON	BE EF	03	06 00	5B D7	01 00	14 30	01 00
		Get	BE EF	03	06 00	F8 D6	02 00	14 30	00 00
KEYSTONE V		Get	BE EF	03	06 00	B9 D3	02 00	07 20	00 00
		Increment	BE EF	03	06 00	DF D3	04 00	07 20	00 00
		Decrement	BE EF	03	06 00	0E D2	05 00	07 20	00 00
KEYSTONE V Reset		Execute	BE EF	03	06 00	08 D0	06 00	0C 70	00 00
WHISPER	Set	NORMAL	BE EF	03	06 00	3B 23	01 00	00 33	00 00
		WHISPER	BE EF	03	06 00	AB 22	01 00	00 33	01 00
		Get	BE EF	03	06 00	08 23	02 00	00 33	00 00
MIRROR	Set	NORMAL	BE EF	03	06 00	C7 D2	01 00	01 30	00 00
		H:INVERT	BE EF	03	06 00	57 D3	01 00	01 30	01 00
		V:INVERT	BE EF	03	06 00	A7 D3	01 00	01 30	02 00
		H&V:INVERT	BE EF	03	06 00	37 D2	01 00	01 30	03 00
		Get	BE EF	03	06 00	F4 D2	02 00	01 30	00 00
VOLUME-COMPUTER		Get	BE EF	03	06 00	CD CC	02 00	60 20	00 00
		Increment	BE EF	03	06 00	AB CC	04 00	60 20	00 00
		Decrement	BE EF	03	06 00	7A CD	05 00	60 20	00 00
VOLUME-Video		Get	BE EF	03	06 00	31 CD	02 00	61 20	00 00
		Increment	BE EF	03	06 00	57 CD	04 00	61 20	00 00
		Decrement	BE EF	03	06 00	86 CC	05 00	61 20	00 00
VOLUME-S-Video		Get	BE EF	03	06 00	75 CD	02 00	62 20	00 00
		Increment	BE EF	03	06 00	13 CD	04 00	62 20	00 00
		Decrement	BE EF	03	06 00	C2 CC	05 00	62 20	00 00
VOLUME – MIU		Get	BE EF	03	06 00	45 CC	02 00	66 20	00 00
		Increment	BE EF	03	06 00	23 CC	04 00	66 20	00 00
		Decrement	BE EF	03	06 00	F2 CD	05 00	66 20	00 00
MUTE	Set	TURN OFF	BE EF	03	06 00	46 D3	01 00	02 20	00 00
		TURN ON	BE EF	03	06 00	D6 D2	01 00	02 20	01 00
		Get	BE EF	03	06 00	75 D3	02 00	02 20	00 00
AUDIO – MIU	Set	TURN OFF	BE EF	03	06 00	76 DD	01 00	36 20	00 00
		AUDIO IN	BE EF	03	06 00	E6 DC	01 00	36 20	01 00
		MIU	BE EF	03	06 00	B6 D0	01 00	36 20	10 00
		Get	BE EF	03	06 00	45 DD	02 00	36 20	00 00
IR REMOTE FREQ. NORMAL	Set	Off	BE EF	03	06 00	FF 3D	01 00	30 26	00 00
		On	BE EF	03	06 00	6F 3C	01 00	30 26	01 00
		Get	BE EF	03	06 00	CC 3D	02 00	30 26	00 00
IR REMOTE FREQ. HIGH	Set	Off	BE EF	03	06 00	03 3C	01 00	31 26	00 00
		On	BE EF	03	06 00	93 3D	01 00	31 26	01 00
		Get	BE EF	03	06 00	30 3C	02 00	31 26	00 00

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Command Control via the Network (continued)

Network command table (continued)

Names	Operation Type	Header				Command Data			
		CRC	Action	Type	Setting Code				
LANGUAGE	Set	ENGLISH	BE EF	03	06 00	F7 D3	01 00	05 30	00 00
		FRANÇAIS	BE EF	03	06 00	67 D2	01 00	05 30	01 00
		DEUTSCH	BE EF	03	06 00	97 D2	01 00	05 30	02 00
		ESPAÑOL	BE EF	03	06 00	07 D3	01 00	05 30	03 00
		ITALIANO	BE EF	03	06 00	37 D1	01 00	05 30	04 00
		NORSK	BE EF	03	06 00	A7 D0	01 00	05 30	05 00
		NEDERLANDS	BE EF	03	06 00	57 D0	01 00	05 30	06 00
		PORTUGUÊS	BE EF	03	06 00	C7 D1	01 00	05 30	07 00
		日本語	BE EF	03	06 00	37 D4	01 00	05 30	08 00
		简体中文	BE EF	03	06 00	A7 D5	01 00	05 30	09 00
		繁體中文	BE EF	03	06 00	37 DE	01 00	05 30	10 00
		한글	BE EF	03	06 00	57 D5	01 00	05 30	0A 00
		SVENSKA	BE EF	03	06 00	C7 D4	01 00	05 30	0B 00
		РУССКИЙ	BE EF	03	06 00	F7 D6	01 00	05 30	0C 00
		SUOMI	BE EF	03	06 00	67 D7	01 00	05 30	0D 00
		POLSKI	BE EF	03	06 00	97 D7	01 00	05 30	0E 00
		TÜRKÇE	BE EF	03	06 00	07 D6	01 00	05 30	0F 00
		Get	BE EF	03	06 00	C4 D3	02 00	05 30	00 00
MENU POSITION H		Get	BE EF	03	06 00	04 D7	02 00	15 30	00 00
		Increment	BE EF	03	06 00	62 D7	04 00	15 30	00 00
		Decrement	BE EF	03	06 00	B3 D6	05 00	15 30	00 00
MENU POSITION H Reset		Execute	BE EF	03	06 00	DC C6	06 00	43 70	00 00
MENU POSITION V		Get	BE EF	03	06 00	40 D7	02 00	16 30	00 00
		Increment	BE EF	03	06 00	26 D7	04 00	16 30	00 00
		Decrement	BE EF	03	06 00	F7 D6	05 00	16 30	00 00
MENU POSITION V Reset		Execute	BE EF	03	06 00	A8 C7	06 00	44 70	00 00
BLANK	Set	MyScreen	BE EF	03	06 00	FB CA	01 00	00 30	20 00
		ORIGINAL	BE EF	03	06 00	FB E2	01 00	00 30	40 00
		BLUE	BE EF	03	06 00	CB D3	01 00	00 30	03 00
		WHITE	BE EF	03	06 00	6B D0	01 00	00 30	05 00
		BLACK	BE EF	03	06 00	9B D0	01 00	00 30	06 00
		Get	BE EF	03	06 00	08 D3	02 00	00 30	00 00
BLANK On/Off	Set	TURN OFF	BE EF	03	06 00	FB D8	01 00	20 30	00 00
		TURN ON	BE EF	03	06 00	6B D9	01 00	20 30	01 00
		Get	BE EF	03	06 00	C8 D8	02 00	20 30	00 00
START UP	Set	MyScreen	BE EF	03	06 00	CB CB	01 00	04 30	20 00
		ORIGINAL	BE EF	03	06 00	0B D2	01 00	04 30	00 00
		TURN OFF	BE EF	03	06 00	9B D3	01 00	04 30	01 00
		Get	BE EF	03	06 00	38 D2	02 00	04 30	00 00
MyScreen LOCK	Set	TURN OFF	BE EF	03	06 00	3B EF	01 00	C0 30	00 00
		TURN ON	BE EF	03	06 00	AB EE	01 00	C0 30	01 00
		Get	BE EF	03	06 00	08 EF	02 00	C0 30	00 00
MESSAGE	Set	TURN OFF	BE EF	03	06 00	8F D6	01 00	17 30	00 00
		TURN ON	BE EF	03	06 00	1F D7	01 00	17 30	01 00
		Get	BE EF	03	06 00	BC D6	02 00	17 30	00 00
AUTO SEARCH	Set	TURN OFF	BE EF	03	06 00	B6 D6	01 00	16 20	00 00
		TURN ON	BE EF	03	06 00	26 D7	01 00	16 20	01 00
		Get	BE EF	03	06 00	85 D6	02 00	16 20	00 00

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Network command table (continued)

Names	Operation Type	Header				Command Data		
		CRC	Action	Type	Setting Code			
AUTO OFF	Get	BE EF	03	06 00	08 86	02 00	10 31	00 00
	Increment	BE EF	03	06 00	6E 86	04 00	10 31	00 00
	Decrement	BE EF	03	06 00	BF 87	05 00	10 31	00 00
AUTO ON	Set	TURN OFF	BE EF	03	06 00	3B 89	01 00	20 31
		TURN ON	BE EF	03	06 00	AB 88	01 00	20 31
	Get	BE EF	03	06 00	08 89	02 00	20 31	00 00
LAMP TIME	Get	BE EF	03	06 00	C2 FF	02 00	90 10	00 00
LAMP TIME Reset	Execute	BE EF	03	06 00	58 DC	06 00	30 70	00 00
FILTER TIME	Get	BE EF	03	06 00	C2 F0	02 00	A0 10	00 00
FILER TIME Reset	Execute	BE EF	03	06 00	98 C6	06 00	40 70	00 00
AUTO KEYSTONE EXECUTE	Execute	BE EF	03	06 00	E5 D1	06 00	0D 20	00 00
AUTO KEYSTONE	Set	TURN OFF	BE EF	03	06 00	EA D1	01 00	0F 20
		TURN ON	BE EF	03	06 00	7A D0	01 00	0F 20
	Get	BE EF	03	06 00	D9 D1	02 00	0F 20	00 00
MY BUTTON-1	COMPUTER	BE EF	03	06 00	3A 33	01 00	00 36	00 00
	MIU	BE EF	03	06 00	9A 30	01 00	00 36	06 00
	S-VIDEO	BE EF	03	06 00	5A 32	01 00	00 36	02 00
	VIDEO	BE EF	03	06 00	AA 32	01 00	00 36	01 00
	e-SHOT	BE EF	03	06 00	5A 3D	01 00	00 36	16 00
	INFORMATION	BE EF	03	06 00	FA 3E	01 00	00 36	10 00
	AUTO KEYSTONE EXECUTE	BE EF	03	06 00	6A 3F	01 00	00 36	11 00
	MY MEMORY	BE EF	03	06 00	9A 3F	01 00	00 36	12 00
	PICTURE MODE	BE EF	03	06 00	0A 3E	01 00	00 36	13 00
	FILTER RESET	BE EF	03	06 00	3A 3C	01 00	00 36	14 00
	VOLUME +	BE EF	03	06 00	CA 3C	01 00	00 36	17 00
	VOLUME -	BE EF	03	06 00	3A 39	01 00	00 36	18 00
	Get	BE EF	03	06 00	09 33	02 00	00 36	00 00
MY BUTTON-2	COMPUTER	BE EF	03	06 00	C6 32	01 00	01 36	00 00
	MIU	BE EF	03	06 00	66 31	01 00	01 36	06 00
	S-VIDEO	BE EF	03	06 00	A6 33	01 00	01 36	02 00
	VIDEO	BE EF	03	06 00	56 33	01 00	01 36	01 00
	e-SHOT	BE EF	03	06 00	A6 3C	01 00	01 36	16 00
	INFORMATION	BE EF	03	06 00	06 3F	01 00	01 36	10 00
	AUTO KEYSTONE EXECUTE	BE EF	03	06 00	96 3E	01 00	01 36	11 00
	MY MEMORY	BE EF	03	06 00	66 3E	01 00	01 36	12 00
	PICTURE MODE	BE EF	03	06 00	F6 3F	01 00	01 36	13 00
	FILTER RESET	BE EF	03	06 00	C6 3D	01 00	01 36	14 00
	VOLUME +	BE EF	03	06 00	36 3D	01 00	01 36	17 00
	VOLUME -	BE EF	03	06 00	C6 38	01 00	01 36	18 00
	Get	BE EF	03	06 00	F5 32	02 00	01 36	00 00
MAGNIFY	Get	BE EF	03	06 00	7C D2	02 00	07 30	00 00
	Increment	BE EF	03	06 00	1A D2	04 00	07 30	00 00
	Decrement	BE EF	03	06 00	CB D3	05 00	07 30	00 00
FREEZE	Set	NORMAL	BE EF	03	06 00	83 D2	01 00	02 30
		FREEZE	BE EF	03	06 00	13 D3	01 00	02 30
	Get	BE EF	03	06 00	B0 D2	02 00	02 30	00 00
e-SHOT	Set	OFF	BE EF	03	06 00	3A C3	01 00	00 35
		IMAGE1	BE EF	03	06 00	AA C2	01 00	00 35
		IMAGE2	BE EF	03	06 00	5A C2	01 00	00 35
		IMAGE3	BE EF	03	06 00	CA C3	01 00	00 35
		IMAGE4	BE EF	03	06 00	FA C1	01 00	00 35
	Get	BE EF	03	06 00	09 C3	02 00	00 35	00 00

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